



NEWSLETTER OF THE LONDON CHAPTER,  
ONTARIO ARCHAEOLOGICAL SOCIETY

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Summer 1996

96-4, 5

## WOMEN IN THE CHIMU EMPIRE OF NORTHERN PERU

Dr. Theresa Topic, Brescia College, University of Western Ontario  
Thursday, September 12th, 8:00 PM  
London Museum of Archaeology

For our September speaker night we are pleased to present Dr. Theresa Topic, the new Academic Dean of Brescia College. Dr. Topic will be speaking on her current research which concerns the role of women in the Late Intermediate Chimu Empire in northern Peru (A.D. 1000-1476). So come on out for our first speaker night of the season, **AT THE LONDON MUSEUM OF ARCHAEOLOGY**, 1600 Attawandaron Road (near the corner of Wonderland and Fanshawe Park Road in the northwest end of the city). Meeting time is 8 PM.

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**HEEEY, BOO BOO.... I THINK I SEE A PIC-IN-NIC BASKET!!**

## LONDON CHAPTER ANNUAL PICNIC

Saturday, September 7, 2:00 PM  
Longwoods Road Conservation Area  
Hwy. 2, 6.5 km west of Delaware or 10 km east of Melbourne

Come on out and bring the whole family for a great time! See the Social Report for details.

## Chapter Executive

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### ANNUAL RATES

Individual.....	\$15.00
Family.....	\$18.00
Institutional.....	\$21.00
Subscriber.....	\$17.00

## EXECUTIVE REPORT

We are happy to announce that the Chapter Library is now set up in our new home at 55 Centre Street. The Chapter's collections are located in the foyer on the second floor and are available for use by all members. The collection includes a broad selection of publications, so drop by and browse!

The Executive has also approved the sale of **LIFETIME MEMBERSHIPS** in the London Chapter. For the bargain price of \$300.00 you will never have to think about writing another cheque for membership dues again, and **KEWA** will keep coming to your door for ever and ever... well, almost!

## SOCIAL REPORT

The London Chapter Annual Picnic will be held Saturday, September 7, at 2:00 P.M. at Longwoods Road Conservation area on Hwy. 2, west of Delaware. Admission to the Conservation Area will be **FREE** for members. Bring your own food - barbecues are available in the park and Harri Mattila has offered to be the Fire Marshall (all that picket line experience pays off!). There will be sports (badminton, soccer), hiking, Ska-Nah-Doht village, and lots of opportunity to hash over the highlights of the field season!

Don Simons is looking for **volunteers** to work on the Gainey Site, an early Paleo-Indian site in Michigan. Don has been working at this site for some time. Recently, part of the farm on which the Gainey site is located has been sold and Don is anxious to excavate as much of the site as possible. He plans to be there most weekdays and weekends until freeze-up. If you are interested in volunteering, please contact Don Simons at: 10352 Halsey Road, Grand Blanc, Michigan 48439, U.S.A. Tel: (810) 695-0433

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The Chapter has been saddened by the loss of long-time member and **KEWA** contributor Thomas (Tim) Kenyon. Tim gave us the **KEWA** logo, and was the driving force behind the Nineteenth Century Notes series that ran in **KEWA** through the 1980s. These extremely useful gems have become standard reference material for historic site analyses in Ontario. Tim was well known and widely respected for his broad knowledge of the history and material culture of Ontario. His many contributions include early research on the Fradenburg site which forms the subject of this issue. He will be greatly missed.

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## EDITOR'S REPORT

This month we are happy to be able to bring you a large double issue featuring the results of rescue excavations on the historic Neutral Fradenburg site lead by Chapter member Dana Poulton in 1989. This paper furnishes vital data on the Neutral of the Lower Grand River area and provides a useful overview of the history of Neutral research in that region.



# THE FRADENBURG SITE: AN HISTORIC NEUTRAL VILLAGE ON THE LOWER GRAND RIVER

by D.R. Poulton, C.F. Dodd, M.W. Spence and R.D. Fecteau

## Introduction

This report details results of a partial salvage excavation of the Fradenburg site, located on the Lower Grand River (Figure 1). It represents an historic Neutral village and associated ossuary dating to Glass Bead Period 2, ca. 1620-1630 A.D. Excavations also revealed a Middle Archaic artifact and scant traces of prior occupations during the Middle Woodland and Early Iroquoian periods.

Research since the 1960's has identified a number of discrete clusters of historic Neutral sites in the Niagara Peninsula which probably represent component tribes of the Neutral confederacy. Arguably the poorest known of these is the Lower Grand River cluster, which includes the Fradenburg site.

In the fall of 1989, a house foundation had been constructed at the south end of the Fradenburg site. Archaeological remains were observed around the house construction, at places where the topsoil had been disturbed by heavy machinery. Further, chert debitage, calcined bone and other cultural debris was found scattered throughout the northern end of the field containing the proposed tile bed. Although topsoil had already been bulldozed from the tile bed area, it retained a high potential for subsurface remains such as pits and post moulds. An agreement was reached to allow archaeological investigations of the proposed 20 by 40 m tile bed area, provided that they did not jeopardize the construction schedule.

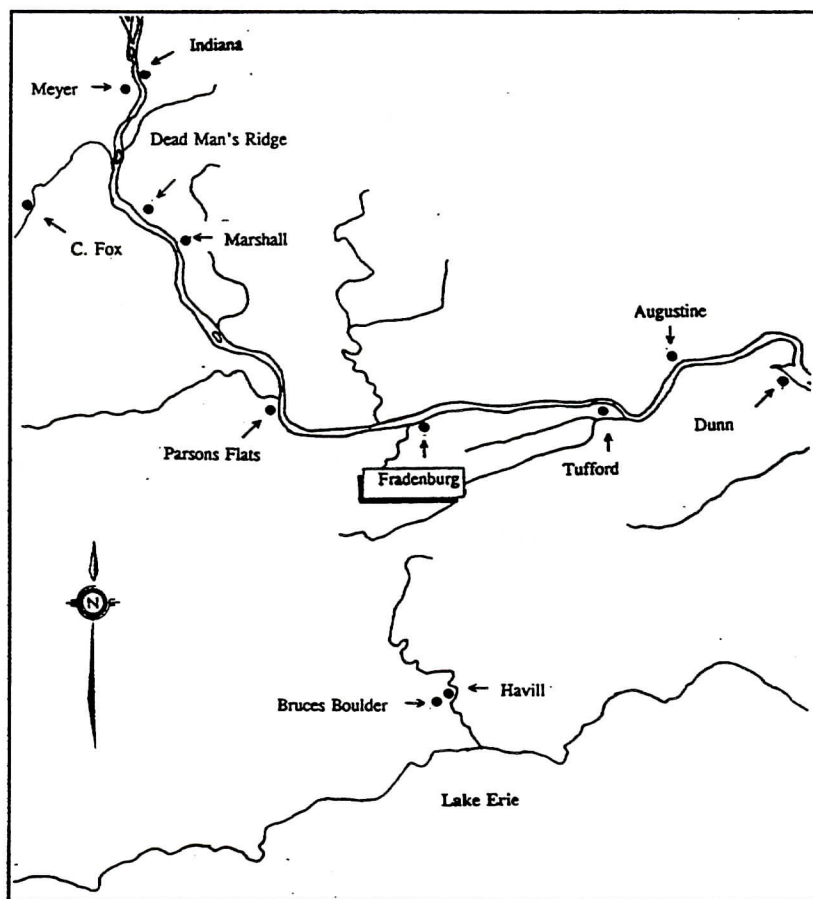


Figure 1. Location of the Fradenburg Site and The Lower Grand River Site Cluster

The Fradenburg excavations were undertaken by Dana Poulton and a crew of volunteers over a five day period at the end of October, 1989. This rescue operation, funded by the Ontario Heritage Foundation, uncovered part of two longhouses together with a segment of palisade (Figure 4).

### Site Description

The Fradenburg site is located near extensive marshes. These marshes would have provided abundant and varied food resources in the immediate area. The site is within the Haldimand Clay Plain physiographic region. As described by Chapman and Putnam (1984:157), the outstanding characteristics of this region are poor drainage and heavy textured soils. However, the site itself occupies an area of Smithville clay soils. As noted by Presant and Acton (1984:47), Smithville soils are moderately well drained.

The greater site comprises two components with separate registration numbers: a burial component, designated the Fradenburg ossuary (AfGw-2); and the related habitation component,

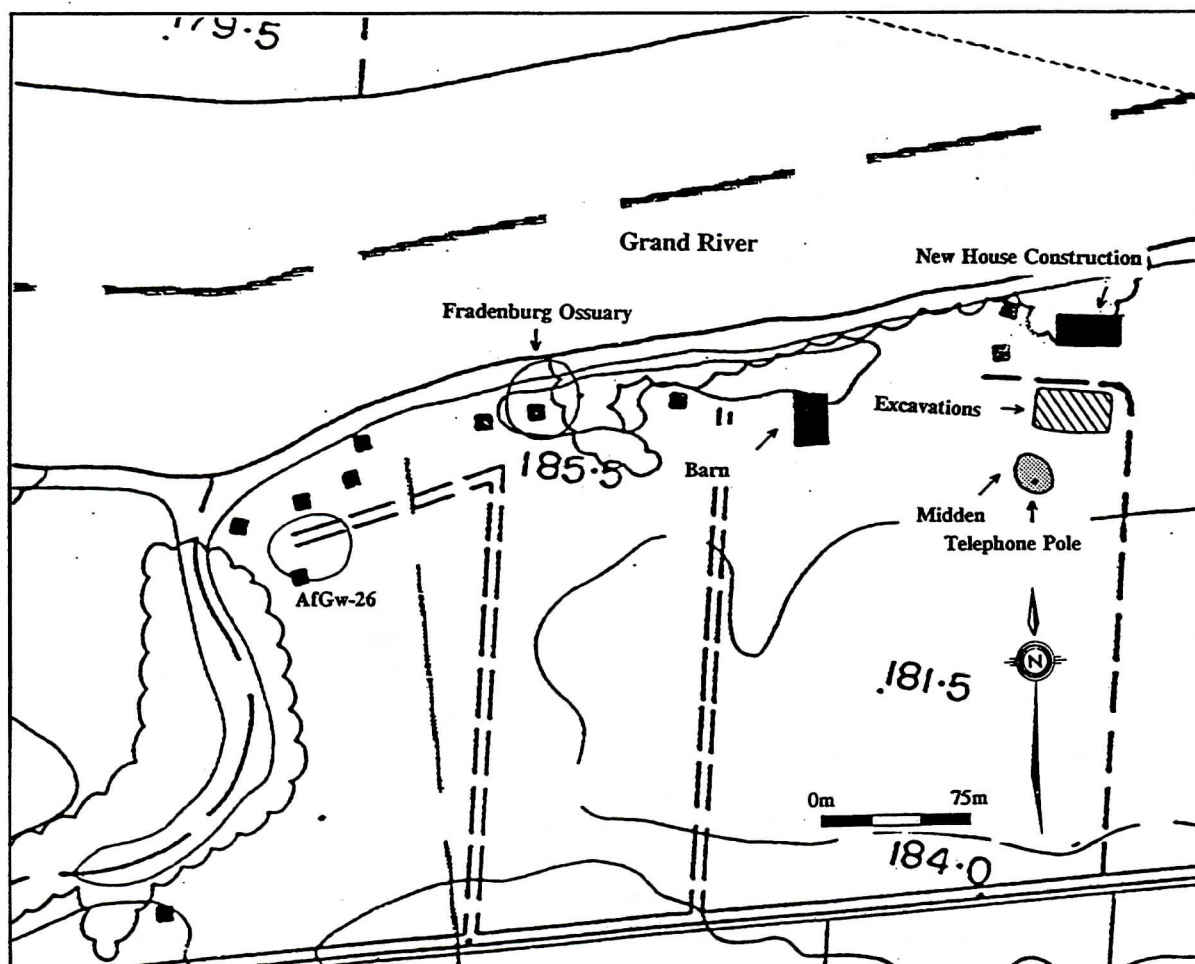


Figure 2. Detail of the Fradenburg Site



designated the Fradenburg site (AfGw-28). The northern, eastern and southern limits of the greater Fradenburg site are all reasonably well defined by either topography or by archaeological investigation. The western limit of the greater Fradenburg site, and the location of the ossuary, are somewhat problematic. Research generally places the burial component in the northwestern part of the greater site, although it is unclear whether the ossuary is located within the limits of the habitation area or just beyond.

The area of the 1989 excavations and the location inferred for the ossuary to the west represent opposite extremes of the greater Fradenburg site. If the site is continuous between these two extremes, it would cover a total area measuring roughly 300 m east-west by up to 100 m north-south, with a surface area in the order of 3 ha. If, on the other hand, the burial and habitation components are discrete, the overall size of the site may be somewhat less. Regardless, investigations suggest that the surface remains representing the habitation component extend well beyond the barn to the west (Figure 2). This would indicate that the habitation area has an east-west extent of at least 200 m, with a minimum surface area in the order of 2 ha. These measurements would be consistent with the interpretation of the habitation component as a village rather than a hamlet.

### **Previous Archaeological Investigations**

Research indicates that the Fradenburg site has been known for at least 60 years. As with most historic Neutral sites discovered in the 19<sup>th</sup> or early 20<sup>th</sup> century, initial interest in this site tended to focus on the burial component, which was looted prior to any formal investigation.

The earliest record of the site dates to the 1930's, and pertains to the work of Peter M. Pringle. Pringle was active in the documentation of archaeological sites in the Niagara Peninsula in the period ca. 1920-1940, most notably through his study of existing artifact collections. His records include a series of oversize maps of the Lower Grand from Cayuga to Port Maitland. One of these depicts the Fradenburg site.

A check of the Pringle records on file at the Royal Ontario Museum was kindly undertaken by Dr. Mima Kapches of the Department of New World Archaeology. No notes concerning the site were located, but a listing in the Pringle catalogue did identify five artifacts in the holdings of the R.O.M. (pers. comm., March 25, 1996). These were listed as a point, a carbonized shell fragment, a possible axe preform, a netsinker, and a bone. The provenience for these specimens records that they were recovered "from Fradenburg Ossuary", "below the high bank of the Grand River". Two of the specimens were illustrated in Pringle's photographic plates, including a small shell object, possibly a pendant. The latter specimen, Item 10 on the plate, has the following inscription written on it: "Fradenburg Ossuary (Nov. 15 1936)". This notation provides the one hard date for Pringle's investigation of the site.

Useful data on the Fradenburg site were recorded in the late 1960's by Ian Kenyon in his seminal study of glass beads from Neutral sites. Among the private collections examined by Kenyon was that of Frank Kingdon of St. Catharines, who had five glass beads from the

previously-looted Fradenburg ossuary (Kenyon 1969:4). These artifacts represent the only known glass bead sample from the ossuary. Kenyon noted that "the white football, indigo football and indigo round are the only types from the Fradenburg ossuary": these placed the site in Glass Bead Period 2 (Ibid.: 12-13). No details are available on Kingdon's activities at the Fradenburg Ossuary, although it is known that he was active during the 1960's and earlier (Ian Kenyon, pers. comm., April 2, 1996). Ian Kenyon's work on this and other sites in the Lower Grand also benefited from the research carried out by his father, Thomas Kenyon, who had visited the Fradenburg site (Stothers 1974:173).

Ian Kenyon followed his initial glass bead study with a survey of Neutral sites in 1971. While his field work focussed primarily on the Hamilton area, he did present data on sites throughout the Niagara Peninsula, including the Fradenburg, Tufford and Indiana sites on the Lower Grand. These three sites constituted the nucleus of what is now recognized as the Lower Grand River cluster of the historic Neutral. Kenyon attempted to examine the Fradenburg site during the course of his survey, but was refused permission by a hostile landowner (Stothers 1974:173). He interpreted the three Neutral sites on the Lower Grand as probable seasonal hunting and fishing camps, although he did note that the presence of the ossuary at Fradenburg was "unusual" (Kenyon 1972:7).

Further fieldwork on the Fradenburg site was carried out in 1974 during the course of an archaeological survey of the Grand River by David Stothers (1974). In the case of Fradenburg, this involved little more than the confirmation of its existence. However, the 1974 survey did serve to root the Fradenburg site more firmly in the data base, by the registration of this and other sites, and by the preparation of sketch maps which illustrated the position of the site relative to others in the immediate area.

Further limited archaeological investigations of the site were carried out in 1976 by Paul Lennox, during the course of a survey of Neutral sites in the Niagara Peninsula. This project was funded by a Canada Council grant to William Noble of McMaster University. The pertinent investigations of the Fradenburg site are described under the heading "The Jensen site" (Lennox 1976:6).

## **Historic and Geographic Context**

The 1989 salvage investigations provided the first detailed information on the occupation of the Fradenburg site. However, the nature of this occupation, the role it played in historic Neutral development within the area, and its relationship to contemporary settlement and subsistence patterns elsewhere in Neutralia are really only intelligible through comparisons with other sites, both within the Lower Grand and beyond. In order to appreciate the extent and limitations of our knowledge on the historic Neutral occupation of the Lower Grand, it is necessary to examine the subject within the broader context of Neutral research. Accordingly, the description of the methods and results of the salvage excavation of the Fradenburg site will be prefaced by a discussion of previous research in the area and an outline of the known inventory of late prehistoric and historic Neutral sites on the Lower Grand.



## An Overview of Research on Historic Neutral

The historic Neutral have been the subject of study by professional and amateur archaeologists for over 150 years. The period from the early to late 19<sup>th</sup> century was characterized by accidental discoveries and the deliberate looting of sites, most particularly burials, a practice which has continued down to the present time. Research around the turn of the century by scholars such as David Boyle (1888), Frank Waugh (1903) and Frederick Houghton (1909) preserved a great deal of information on many of these sites, and helped establish a basis for the beginnings of an understanding of the culture history and archaeological manifestations of the Neutral. The mid 20<sup>th</sup> century saw a hiatus in professional fieldwork on the historic Neutral, but data continued to accumulate through the activities of avocational archaeologists and artifact collectors, including Peter Pringle, John Steele, William Cleland and Rutherford Smith.

The study of the historic Neutral received a renewed impetus in 1961, when Frank Ridley published **The Archaeology of the Neutral Indians**, the first synthesis on the subject. The principal geographic focus of Ridley's study, and of much of the research before and since, was the area encompassed within a 20 mile radius of the City of Hamilton, including the drainages of Fairchild Creek, Big Creek, Upper Twenty Mile Creek, Spencer Creek and Bronte Creek. Beginning in the 1960's, however, research expanded to other areas which had been either long neglected or never before investigated. These included the Oakville or 16 Mile Creek drainage of the Milton area, the subject of investigations by the University of Toronto, the Ontario Archaeological Society, and the London Museum of Archaeology (Halpren 1973, Reid and Conway 1976, Finlayson, Brown and Turton 1989), and the Niagara Frontier, the focus of study by Marian White (White 1961, 1972).

In the late 1960's, Dr. William Noble of McMaster University instituted a long term research program to study the Neutral of the Niagara Peninsula. The inception of this program was arguably the single most significant event in the history of historic Neutral research. Surveys and excavations by Noble and his students lead to the publication of a series of site monographs and regional syntheses (eg. Noble 1978, 1980, 1984, M. Wright 1981, Lennox 1981, 1984a, 1984b, Fitzgerald 1982). This research laid the groundwork for the study of Neutral settlement and subsistence patterns, and played a significant role in delineating geographical site clusters which probably correspond to constituent tribes of the historic Neutral confederacy. Another notable outgrowth of the research originating from McMaster University was the recognition of the importance of glass trade beads as a tool for refining the historic Neutral chronology (eg. Kenyon 1969, 1972, Kenyon and Kenyon 1983, Kenyon and Fox 1982, Fitzgerald 1983, 1990). This research has been supplemented by additional academic studies by graduate students: a study of the protohistoric Fonger site and Iroquoian village organization, the subject of a master thesis by Gary Warrick of Simon Fraser University (Warrick 1984); the study of the historic Neutral population on the northeast shore of Lake Erie, the subject of Ph.D. research by Martin Cooper of the University of Toronto (Cooper 1985); and the study of the chronology and culture history of the historic Neutral, the subject of a Ph.D. thesis by William Fitzgerald of McGill University (Fitzgerald 1990).



Researchers have long been familiar with the threat posed to archaeological sites by amateur looting, but the accidental discovery of the historic Neutral Grimsby cemetery in 1976 during subdivision construction led to a greater awareness of another danger: that posed by development (W. Kenyon 1982). Fortunately, a series of events since the mid 1970's have helped to ensure a more effective management of archaeological resources. Principal among these are the advent of legislation affording some measures for the identification and protection of archaeological planning concerns; the evolution of the role of what is now the Ministry of Citizenship, Culture and Recreation (MCZCR) in the management of the resource; the increasing participation of avocational archaeologists, most notably in the Archaeological Conservation Officer (ACO) program created and managed by Ministry staff; and the advent of Cultural Resource Management (CRM) as a profession for private and public sector archaeologists.

All of these various elements have made valuable contributions to historic Neutral research over the past quarter century. Efforts by MCZCR personnel have ranged from the administration of CRM practices to the setting of legal precedents (Fox 1985), and to active field work in the assessment and salvage of threatened resources (eg. Warrick 1983, I. Kenyon 1985, 1986, Ferris 1987, MacDonald 1991). Archaeological resource assessments by CRM staff of the Ministry of Transportation have enabled the salvage of some sites by excavation (i.e., Dodd 1995) and the preservation of others by avoidance (Lennox and Murphy 1989).

Private sector consultants have also made notable contributions to the field. For example, resource assessment and site testing have led to the identification of a hitherto unknown late historic Neutral community below the Niagara Escarpment on the Lower Bronte creek drainage (Poulton 1994). Another example is new information which has come to light through recent investigations by Archaeological Services Inc. in the Town of Fort Erie (Williamson 1996). The discoveries in Fort Erie have also benefited from the efforts of Jim Pengelly, illustrating the continuing role of avocational archaeologists in the study and conservation of the archaeological resources of the historic Neutral.

Research in the Niagara Peninsula since the late 1960's has led to the recognition of a number of discrete clusters of sites which probably correspond to constituent tribes of the Neutral confederacy. Altogether, the sites represented span the period from the late prehistoric period in the early 16th century through to the demise of the historic Neutral in 1650-1651 A.D. These site clusters extend from the Grand River to Lake Ontario, and from the Niagara Frontier to the vicinity of Milton (Figure 3).

### **History of Research on the Lower Grand**

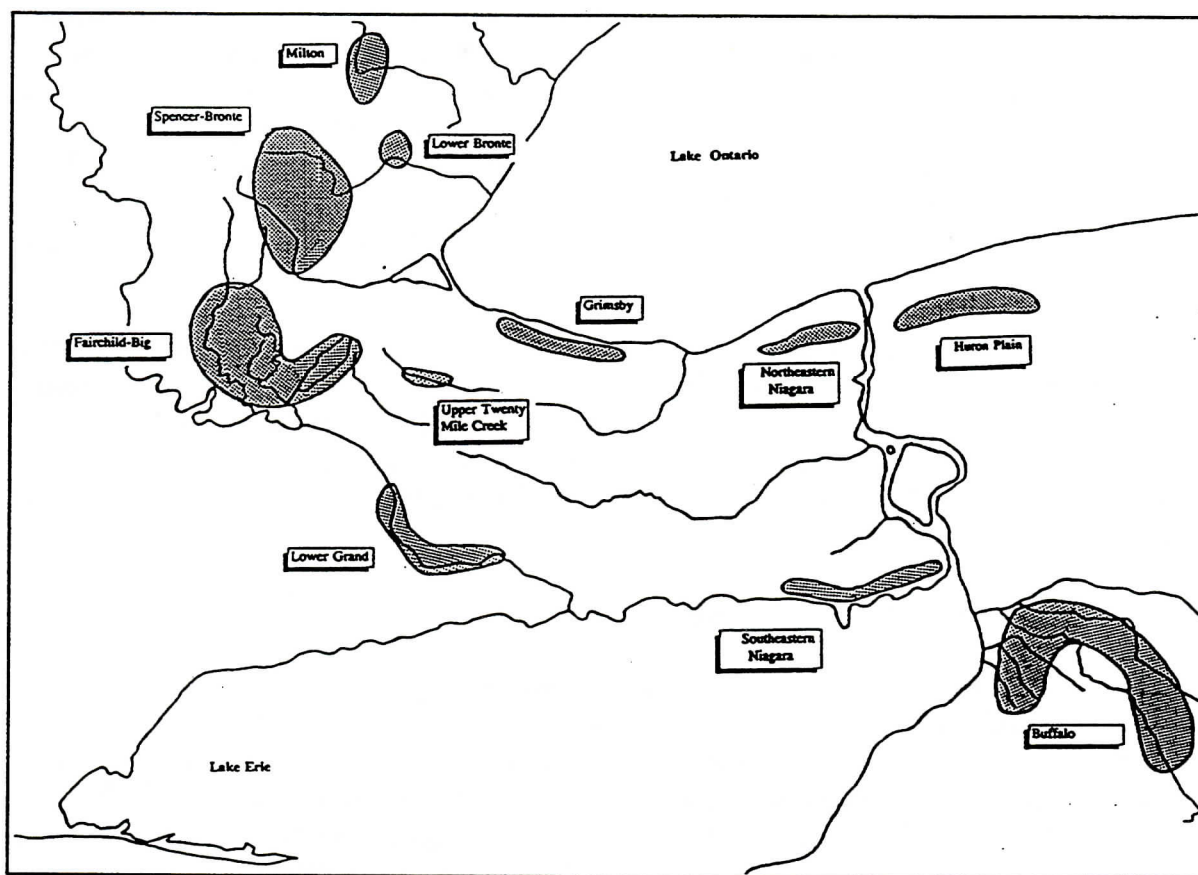
The area of the Lower Grand River from Caledonia down to Lake Erie has traditionally been something of a backwater in the study of the Neutral. However, the investigations which have been carried out here have included many of the basic elements outlined above for the broader realm of historic Neutral research. Among these are the role of avocational archaeologists in survey and site monitoring, the activities of academics engaged in pure research, and the contributions of MCZCR staff in archaeological resource management. Altogether, these



investigations have spanned more than half a century.

Several of the advances in our knowledge of this area have come as a result of survey. Peter Pringle's investigations of the Fradenburg site recognized an historic Neutral presence on the Lower Grand as early as the 1930's. Later survey by Thomas Kenyon resulted in additional discoveries of relevance to this occupation, but it was not until the late 1960's and early 1970's that researchers, such as Ian Kenyon (1969, 1972), Stothers (1974) and Lennox (1976), began the task of placing this occupation in a theoretical construct. More recent discoveries by Archaeological Conservation Officer Fred Moerschfelder in the 1980's have helped to expand our understanding of settlement and subsistence activities in the area, by the addition of three sites which are located some distance from the Grand River itself. One of these is the C. Fox site, an interior camp on a tributary of the Grand. The other two sites, Havill and Bruce's Boulder, are chert quarries located near the Lake Erie shore.

Regional syntheses by Marian White and William Noble have also played a role in our understanding of the Neutral over the past quarter century. White (1972) identified a single component on the Lower Grand, while additional components were later recognized by Noble (1978, 1984). Both researchers departed from the view earlier expressed by Ian Kenyon (1972) that the historic Neutral occupation of the Lower Grand reflected nothing more than the seasonal



**Figure 3.** Historic Neutral Site Clusters (after Lennox and Fitzgerald 1990:411)

exploitation of local resources by Neutral peoples from one or more of the established Neutral site clusters. Rather, Noble and White interpreted the Neutral presence on the Lower Grand as a discrete site cluster. Despite this, the comparatively insubstantial nature of this cluster was underscored by the limited number of sites identified, and by the fact the one habitation site on the Lower Grand (Fradenburg?) was identified by Noble (1984:Figure 4) as a hamlet rather than a village.

A map of ca. 1680 by Claude Bernou depicts two village markers north of Lake Erie between the Grand River and Long Point, identified as "Antouaronon, Nation detruite". Noble and White equated this group with the historic Neutral of the area, as one of the several constituent tribes of the historic Neutral. Noble (1978, 1984) and Jamieson (1981) have also argued that the historic Neutral constituted a chiefdom, and that the nine or ten constituent tribes were under the authority of an absolute chief named Souharissen.

Noble (1984:15) inferred that the historic Neutral population of the Lower Grand was located at the nexus of major trails leading to Neutral tribal clusters in Fairchild Creek and Big Creek to the northwest, the St. Davids area to the northeast, and the area of Port Colborne and Fort Erie to the southeast. He further viewed the geographical placement of the various Neutral tribes as the manifestation of a larger political design, as follows:

It is also apparent during the early historic period that the Neutrals deliberately placed settlements in a sequence ringing the Niagara Peninsula (see Fig. 2). Distributed down the lower Grand River and across the northeastern shore of Lake Erie, the site chain continues along the Niagara Escarpment from St. Davids to Hamilton. Such sites were probably mechanism for defining and defending the rich unoccupied wetlands south and southeast of the main centre of Neutral site concentration that lies within a 20-mile (32 km) radius of Hamilton. Thus, wide territorial command emerges as a strategic determinant in historic Neutral Iroquoian settlement patterns. (Noble 1984:16).

The suggestion that the broad sweep of historic Neutral settlement patterns is the expression of what was in effect a geopolitical master plan is easier to accept if one also accepts the hypothesis that the Neutral were a chiefdom. However, it may be that the same effect was achieved for the Neutral confederacy in whole or in part incidentally, through the settlement and evolution of communities over a period of time, in areas where there were sufficient natural resources to support their existence.

Two recent studies have examined the Neutral of the Lower Grand in a wider context. One of these is the chapter on the Neutral by Paul Lennox and William Fitzgerald (1990) in **The Archaeology of Southern Ontario to A.D. 1650**. The other is the Ph.D. thesis on the Neutral by William Fitzgerald (1990) of McGill University.

With respect to the historic identity of these people, Fitzgerald argues that the Antouaronon were not a Neutral tribe, as inferred by Noble and White, but that they equate with the Entouhonoron



or Antouhonoron, the New York Iroquois group who were attacked by Champlain and a party of Native allies in 1615. Fitzgerald cites the belief by Trigger (1976:311) that "Antouaronons" was a term used by Champlain for the Seneca, Cayuga, Oneida and Onondaga tribes of the New York Iroquois, and further notes that no archaeologically identified seventeenth century group has been confirmed in the area where Bernou placed the Antouaronon (Fitzgerald 1990:261-262). While it may well be that Bernou misidentified the group in question, seventeenth century maps are often imprecise in the particulars. Therefore, the recognition of problems with the Bernou map does not necessarily negate the existence of an historic native presence as mapped for this area, or the correlation of the Lower Grand River historic Neutral with that group.

Fitzgerald (1990) and Lennox and Fitzgerald (1990) identify two historic sites for the Lower Grand River cluster (Table 1). These were the McSorley village and cemetery, which Fitzgerald dates to Glass Bead Period 1 (GBP1), based on material in a private collection; and the Fradenburg village and cemetery, which date to GBP2, based on the original glass bead study by Ian Kenyon (1969) (Fitzgerald 1990:324-326). These two sites were interpreted as representing part of the downstream movement on the Lower Grand of a single community. Fitzgerald suggested the possibility that there was an intermediate site between the occupations of the McSorley and Fradenburg villages. He also noted the absence of a known Glass Bead Period 3 village to succeed Fradenburg.

The site inventory for the Lower Grand is the subject of a more detailed discussion, below. For the present, it may be stated that the identification of the McSorley village and cemetery is somewhat problematic, as it seems to correlate with the Indiana site which previous investigations by Thomas and Ian Kenyon had identified as a less substantial hunting and fishing camp. Although the identification of a GBP1 predecessor to the Fradenburg site would appear to be in some question, research has identified a possible candidate for the successor for the Fradenburg occupation. This is the Tufford site (see below).

### **Site Inventory of the Lower Grand River Cluster**

A detailed analysis of the historic Neutral occupation of the Lower Grand River is beyond the scope of this study. For comparative purposes, however, some effort has been made to assemble an inventory of the relevant sites. This task has been complicated by the fact that the published and unpublished data are limited, and generally lack specific descriptions of individual sites. Other complicating factors are that in at least some cases different authors appear to use different names for the same sites, and generally refer to sites only by name, without an accompanying site registration number. Moreover, some authors have had a tendency not to cite the research of their predecessors, and when they have, to ignore inconsistencies with their own research. All of these factors have tended to inhibit an understanding of the historic Neutral occupation of the area, at least for newcomers to the Lower Grand such as the present authors.

A review of published and unpublished literature, together with an examination of the archaeological site record forms on file at the MCZCR, indicates that at least a dozen Neutral sites have been identified for the 50 km length of the Lower Grand River from Caledonia to Port

Maitland. Of these, nine have been tentatively or definitely identified by one or more researchers as historic Neutral. The locations of these sites are illustrated in Figure 1. Pertinent data on the inventory are summarized in Table 1. Descriptions of the sites are presented below.

***The Indiana Site (AfGx-2)*** This site was discovered by Thomas Kenyon and was later registered by David Stothers (1974). It includes both a Princess Point occupation and an historic Neutral component. Ian Kenyon (1972:7) characterizes the Neutral component as small, and interprets it as a probable seasonal hunting and fishing camp.

Thomas Kenyon recorded that the Indiana site was owned by William McSorley (Stothers 1974:189). Locational data suggest that it is one and the same as the McSorley site, a reputed historic Neutral village and cemetery (Lennox and Fitzgerald 1990:414). The only detailed account of the McSorley site is contained in a thesis by William Fitzgerald (1990:324-326):

The McSorley village and cemetery are situated on a series of knolls on a low-lying plain on the north side of the Grand River. On the basis of several surface examinations, the cemetery seems to consist of one major burial pit. One glass bead has been reported (Ib'2) (Mathews 1988: personal communication); and, marginella and discoidal shell beads as well as a rolled copper bracelet are consistent with GBP1/2 assemblages. The village that lies immediately to the west was devoid of any goods of European origin.

According to Ian Kenyon, a knoll located within a field adjacent to the Indiana site contains the unmarked historic cemetery of the Young family. This cemetery has been badly disturbed by decades of ploughing (Ian Kenyon, pers. comm., April 2, 1996). Further research would be needed to determine the relationship between the nineteenth century Young cemetery and the inferred historic Neutral McSorley cemetery.

***The Meyer Site (AfGx-26)*** This site was registered by David Stothers (1974). It is situated just downstream from the Indiana site. Like Indiana, the Meyer site includes a Princess Point occupation as well as an Iroquoian component. The latter is described as "Late Neutral" (MCZCR site record form).

***The C. Fox Site (AfGx-67)*** Fred Moerschfelder discovered this site in 1982. It is multi-component and consists of a concentration of Haldimand chert debitage covering an area 0.5 to 0.75 ha in size. The centre of this concentration contains an historic Neutral camp site of unknown size, represented by ceramics and projectile points (MCZCR site record form).

***The Dead Man's Ridge Site (AfGx-42)*** This site was registered in the course of Stothers' 1974 Grand River survey. Little information is available on it. Stothers simply records it as "burial area of indeterminate time period (possible ossuary)." The Dead Man's Ridge site may represent the northernmost of two unidentified historic Neutral cemeteries which Noble (1984: Figure 2) maps on the east bank of the Grand in the vicinity of Cayuga.



**The Marshall Ossuary** The location of the Marshall ossuary corresponds roughly to that of an historic Neutral component identified as the "Cayuga site" by Noble (1978: Figure 1). A site at what appears to be the same location is also mapped by White (1972: Figure 1). Neither White (1972) nor Noble (1978) provide any details on this site. However, it may represent the southernmost of two unidentified historic Neutral cemeteries mapped elsewhere by Noble (1984: Figure 4). Pending further investigations, it is assumed that Noble and White's Cayuga site is one and the same as the Marshall ossuary. According to Paul Lennox, a Jesuit ring is rumoured to have been recovered in excavations by the owner of this site (pers. comm. March 28, 1996).

**Table 1: Lower Grand River Neutral Sites, Table of Equivalents**

Site	Borden #	Reference								
		Lennox & Fitzgerald	Fitzgerald 1990	Moerschfelder 1982*	Noble 1984	Noble 1978	Lennox 1976	Stothers 1974	White 1972	Kenyon 1972
Indiana	AfGx-2	McSorley	McSorley					X		Indiana
Meyer	AfGx-26							X		
C.Fox	AfGx-67			X						
Dead Mans Ridge	---				?			X		
Marshall	---				?	Cayuga	X		Cayuga	
Parson's Flats	AfGx-4	Parson's (?)			?		?			
Augustine							X			
Fradenburg	AfGw-2/28	X	X		?	X	Jensen	X		X
Tufford	---									X
Dunn	---				?		X			
Bruce Boulder	AfGw-88			X						
Havill	AfGw-89			X						
Unnamed Cemetery	---				X					

\* Site record form

**Parsons' Flats Site (AfGx-4)** This site was recorded in the course of Lennox's 1975 survey of the Niagara Peninsula. It is situated 5 km upstream from the Fradenburg site. The Parsons' Flats site is probably the same as two other components identified by other researchers. One is an unnamed Late Prehistoric Neutral site which Noble (1984: Figure 7) places at approximately the same location. The other is the Parsons site, a 15<sup>th</sup> century cemetery which is one of three sites of the Lower Grand River cluster tabulated by Lennox and Fitzgerald (1990:414).

***The Tufford Site*** This site was one of three historic Neutral components identified by Ian Kenyon (1972:7) on the Lower Grand. Kenyon characterized the Tufford site as small, and interpreted it as a probable seasonal hunting and fishing camp. A check of this site by Fred Moerschfelder and Ian Kenyon in the late 1980's recovered a IVa 3/6 style glass bead: this suggests a GBP3 date for the site (Ian Kenyon, pers. comm., April 2, 1996).

***The Augustine Site (AfGw-75)*** This multi-component site was documented in the course of Lennox's 1975 survey of the Niagara Peninsula. A prehistoric Neutral component at the Augustine site was recognized by Lennox (1976:11) based on his examination of the landowner's collection. Lennox reports that this component is represented by a few pottery fragments and 15 or more triangular projectile points.

***The Dunn Site*** This site was also documented in the course of Lennox's 1975 survey of the Niagara Peninsula. Lennox (1976:5) records the following with respect to the site: "The small collection of artifacts from this particular site includes a piece of brass lug, several scrap pieces of brass, some small triangular projectile points and some pipe bowl and rim sherd pieces, all attributable to an historic Neutral occupation (Plate #8)."

***Unnamed Cemetery*** An unnamed historic Neutral cemetery is mapped by Noble (1984: Figures 2,4) on the east side of the Lower Grand River a few kilometres from Lake Erie. The mapped location places the site roughly 12 km downstream from the Dunn site.

***The Bruces Boulder site (AfGw-88) and the Havill site (AfGw-89)*** The remaining two historic Neutral components are situated very close to each other. These are the Bruces Boulder site and the Havill site. Both were registered by Fred Moerschfelder in the 1980's. These two sites consist of multi-component chert quarry sites, with occupations from the Early Archaic to the historic Neutral.

## **1989 Archaeological Investigations**

A grid was established by transit with grid north oriented to magnetic north. Grid stakes were set in at 5 m intervals throughout the 40 m by 25 m excavation area. As the depth of remaining ploughzone was too great to permit shovel-shining of the entire area in the time available for the excavations, initial efforts focussed on areas where little topsoil remained and subsurface remains were known to be present. The excavations would then be expanded, as time allowed. As it happened, this strategy permitted the sampling of three areas spanning the length of the proposed tile bed: the southwestern portion of the area, where House 1 had been located; the central portion of the area, where little or no ploughzone remained to be removed; and the eastern portion of the area, where two possible basal middens had been observed (Figure 4).

Excavations in the centre of the proposed tile bed identified a second longhouse structure, which was designated House 2. The southern end of this structure was contained within the area of the proposed tile bed. The northern end evidently extended some distance beyond the limits of concern, underneath the dirt lane which separated the tile bed from the new house.



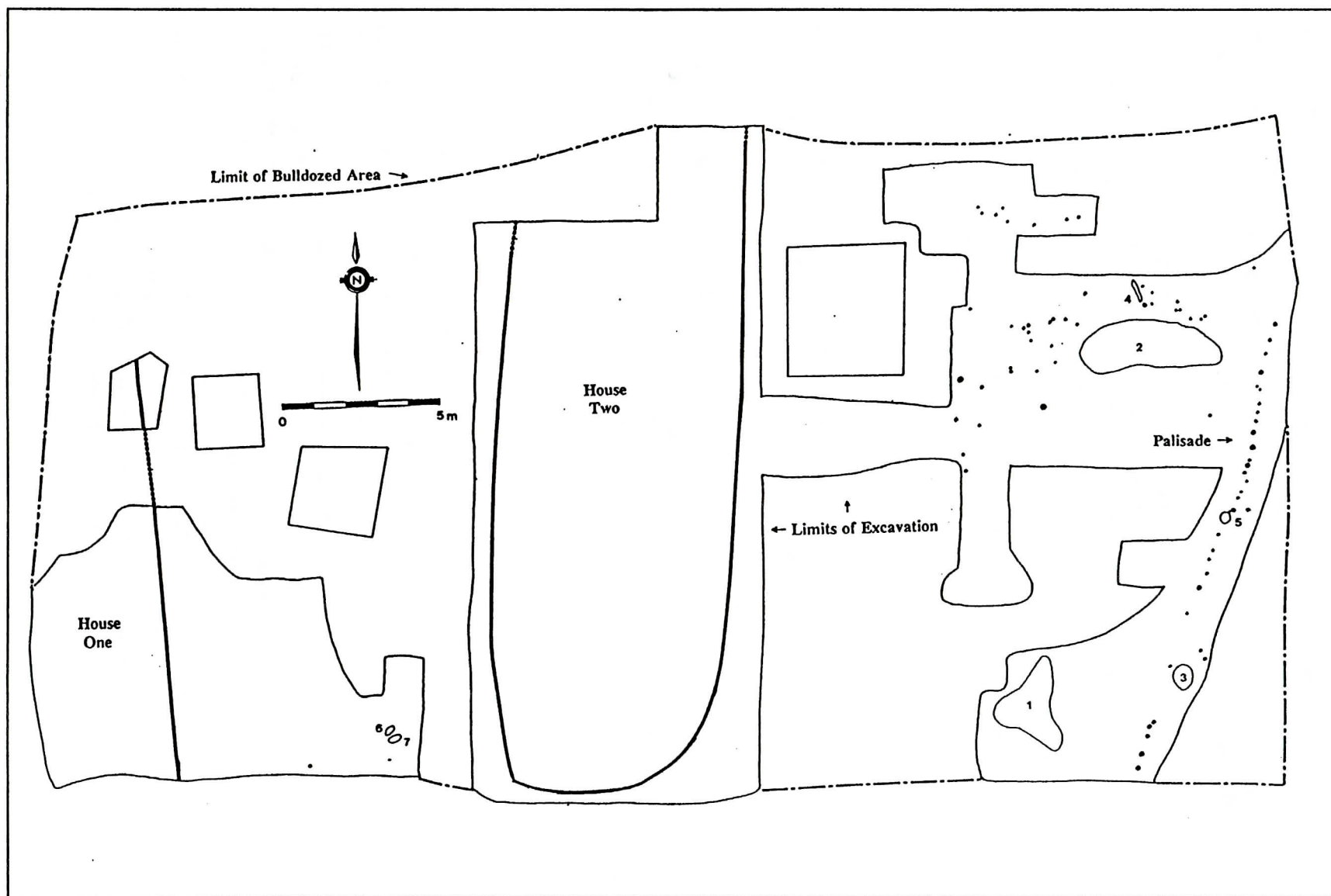


Figure 4. Plan of the 1989 Excavations

Excavations expanding outward from the basal midden deposits in the eastern portion of the proposed tile bed succeeded in defining the limits of those features, and identified three other small features in their vicinity. The only definite structure revealed in this area was the palisade.

Features and post moulds were exposed by shovel and trowel. All features and posts were recorded on pre-printed forms by the process of triangulation from fixed points on the 5 m excavation grid. Plan views of features were drawn. Features were then sectioned by shovel and trowel, and profiles were drawn. Select post moulds were also sectioned, although the pressures of time dictated that this was not done as a matter of course. Feature fill was screened through either 6 mm mesh or 3 mm mesh. In addition, 46 soil samples from select features were retained for flotation. These samples totalled 240.5 litres.

## **Settlement Patterns**

The salvage excavations of the Fradenburg site recorded a total of 66 features and 291 post moulds. As indicated above, the subsurface remains included parts of two separate longhouses and a segment of palisade. The settlement patterns observed are illustrated in Figures 4-6. Detailed analysis of features and post moulds are provided in the licence report (Poulton et al. 1996) and summarized in the following pages.

### **House 1**

House 1 is oriented at a slightly divergent angle to House 2, which is situated 10 m to the east. As illustrated in Figures 4-5, portions of House 1 were exposed in two separate areas. The most extensive area exposed consisted of an 8.5 m length of the eastern half of the structure which included part of the central corridor and a segment of the adjacent east wall. This area was limited to the south by the edge of the ploughed field, to the west and northwest by the large topsoil pile created by the bulldozer, and to the north by an expanse of ploughzone which had only partially been bulldozed. Nevertheless, comparisons with a mean length of 18.9 m for historic Neutral houses (Dodd 1984:414), suggests that a relatively substantial portion of House 1 was excavated.

***Subsurface Features*** Fourteen cultural features were uncovered within House 1. Six of the features consist of slash pits: all of these are oriented parallel to the longitudinal axis of the structure, 1-1.5 m inside the side wall. The slash pits were confined to a 4.5 m length of the main exposure of House 1 (Figure 5). Their average dimensions were as follows: length (n=6), 52.7 cm; width (n=6), 13.7 cm; and depth (n=4), 23.5 cm. These features have the typical form of their type: ovate in plan view and straight-sided and flat-bottomed in cross-section.

Slash pits occur on Neutral sites from the mid 16<sup>th</sup> century onward, and are interpreted as the functional equivalent of large bunkline support posts (Lennox and Fitzgerald 1990: 443). In House 1, these features serve to define a bunkline for storage and for sleeping platforms which extends eastward to the side wall of the structure. As is typical of such structures, the House 1 bunkline is very clean: subsurface remains within it are limited to a single post mould.



Three of the House 1 features are ash pits: all situated in the central corridor. These features had the following average dimensions: length (n=3), 37.7 cm; width (n=3), 24.3 cm; and depth (n=3), 8.0 cm.

Four other features consisted of miscellaneous pits. One of these (Feature 13), located within the side wall, may not be contemporaneous with the structure. The remaining three were located in the central corridor. These four features had the following average dimensions: length (n=4), 42.3 cm; width (n=4), 33.0 cm; and depth (n=4), 19.3 cm.

The one remaining feature within House 1 was Feature 10. It consisted of a concentration of Middle Woodland pottery at the interface of the ploughzone and subsoil. This feature, which measured roughly 39 cm by 39 cm, was situated within the central corridor of the structure. The pottery fragments mended to form two large sections of a single vessel (Figure 8).

Ploughing had evidently destroyed any direct evidence of hearths within House 1. However, there is indirect evidence that at least one hearth was present in the portion of the structure uncovered. Two of the three ash pits recorded within House 1 were mottled with fire-reddened soil indicating the proximity of a hearth: Features 3 and 5. These two features were situated 1.25 m apart, in the central corridor at the southern end of the line of slash pits. Three posts moulds in the central corridor also had fire reddened soil mottling, together with ash and calcined bone. These posts had diameters of 11 cm, 10 cm and 8 cm, respectively. The two larger posts have been interpreted as interior house supports. These posts were situated in the central corridor of the structure, 1.7 m northwest of the nearest pit feature containing fire-reddened soil (Feature 3). Altogether the pits and posts containing fire-reddened soil span a length of 3.5 m. It is assumed that a hearth was located somewhere within this part of House 1.

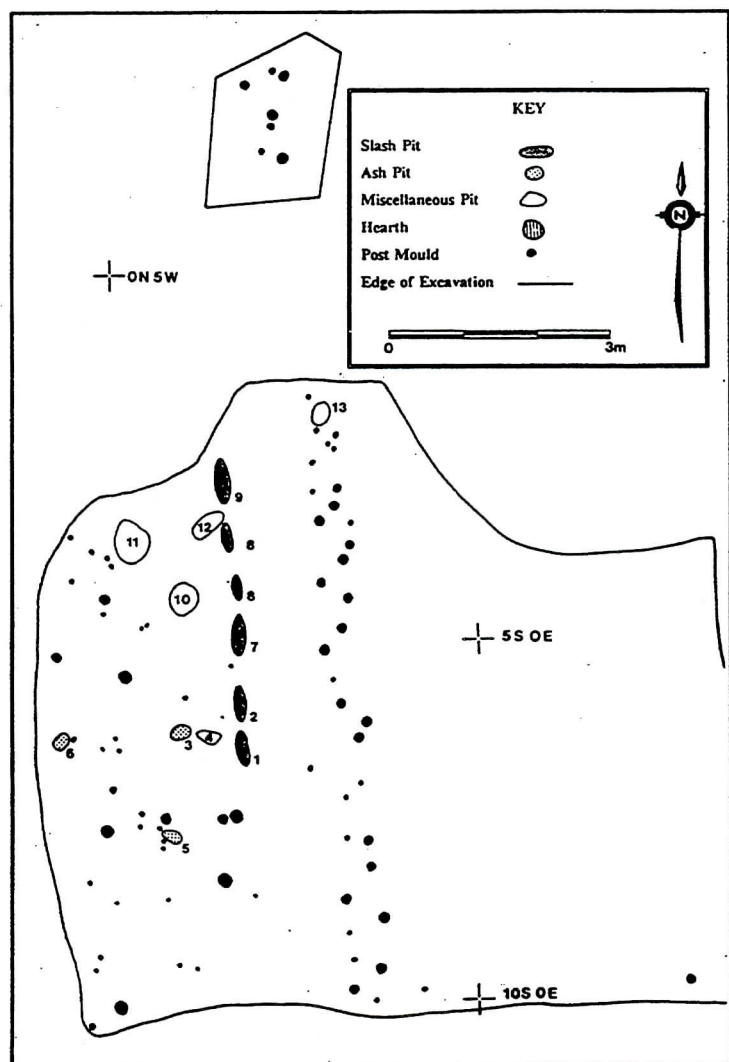


Figure 5. Detail of House 1

**Post Moulds** House 1 is represented by 79 post moulds. These range from 5 to 18 cm in diameter, with an average diameter of 8.94 cm. The House 1 posts consist of 41 wall posts, 9 interior house support posts, and 29 interior house isolated posts.

The House 1 exterior wall is well defined. The 41 side wall post moulds have an average diameter of 9.46 cm, with a range of 7-12 cm. The two segments of the side wall have a combined length of 10.65 m. This yields an average house wall density of 3.84 posts per metre.

The House 1 wall posts tend to occur in a staggered or zig-zag formation. This pattern is relatively common in both Huron and Neutral longhouse construction. In his analysis of the historic Neutral Hood site, Lennox (1984a: 16) observed that the placement of the posts in this manner effectively created an interior and exterior side wall, and suggested that these two rows may have held a more substantial facing than bark, consisting (at least in the lower portion of the wall) of horizontally stacked poles. An alternative possibility is that the posts were staggered to facilitate the horizontal interweaving of smaller saplings. This technique, applied to the lower portion of the walls, would have afforded a degree of structural support, and with less expenditure of labour than the use of larger horizontal poles.

The nine interior house support posts in House 1 range in diameter from 10-18 cm, with an average of 12.89 cm. Several of these are aligned down the central corridor. Two of the support posts (diameters 10 cm and 14 cm) and an additional large post immediately to the south (diameter 18 cm) are roughly aligned with the slash pits, and may have formed bunk line supports. These three posts have a mean diameter of 14.0 cm. Four of the interior support posts are aligned at right angles to the longitudinal axis of the structure. These four posts have diameters of 16 cm, 11 cm, 10 cm and 14 cm, respectively, with an average diameter of 12.75 cm. They may have formed part of an interior partition separating the living quarters of the structure from the communal storage area at the southern end of the structure.

All but one of the 29 interior house isolated post moulds in the structure are located in the central corridor of House 1. The exception is situated between the side wall and the line of slash pits. These posts have a mean diameter of 6.97 cm, with a range of 5-8 cm.

## **House 2**

House 2 is oriented at a slightly divergent angle to House 1, which is located 10 m to the west (Figures 4, 6). Excavations revealed that House 2 had a minimum length of 18.5 m and a width of 7.5 m. This length corresponds well with the average historic Neutral house length of 18.9m (Dodd 1984).

**Subsurface Features** Forty-four cultural features were uncovered within House 2. These consist of 16 slash pits, 8 ash pits, 1 support post, 17 miscellaneous pits, 1 hearth and 1 burial.

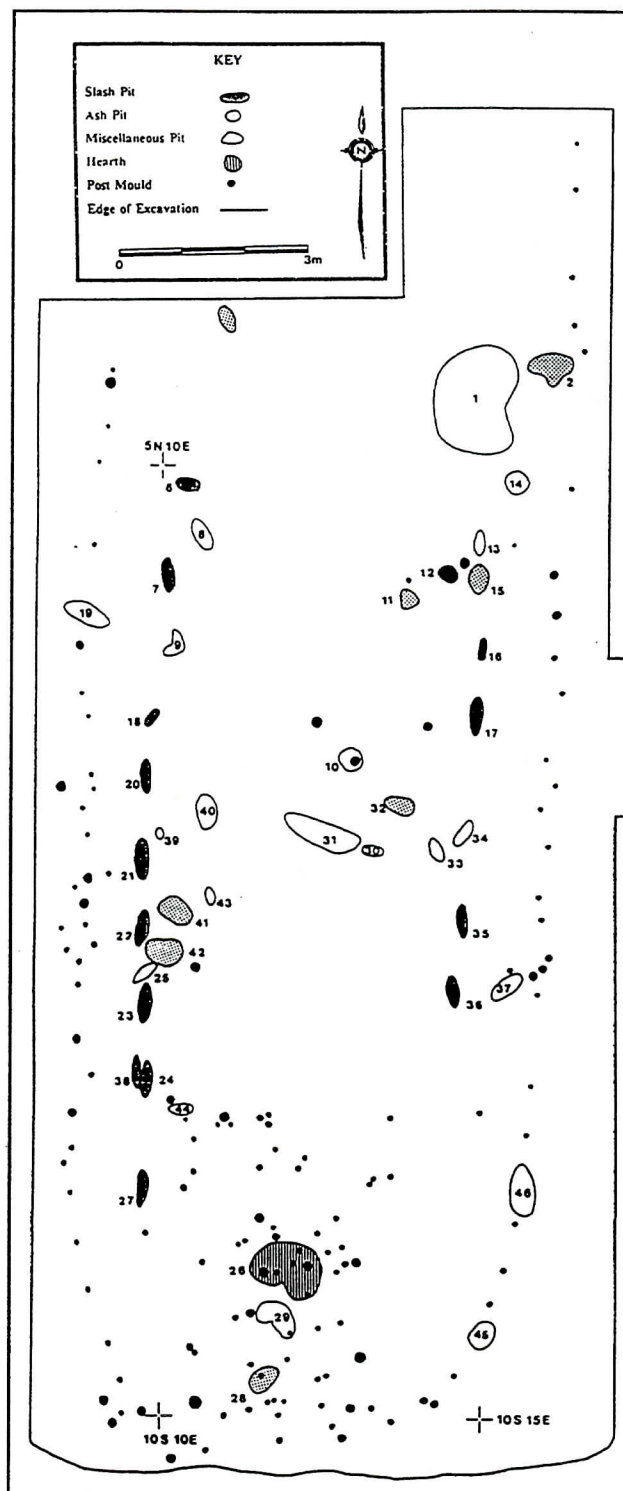


All but one of the 16 slash pits are oriented parallel to the long axis of the house, 1 m inside the side walls. The western side wall of House 2 has 11 slash pits spanning a length of 11.5 m. The northernmost of these (Feature 6) is oriented at right angles to the adjacent side wall. The eastern side wall has five slash pits spanning a length of 7.5 m. These generally parallel the northern segment of the western line of slash pits. The average dimensions of the House 2 slash pits are as follows: length (n=16), 50.1 cm; width (n=16), 17.9 cm; and depth (n=11), 22.2 cm.

The distribution of slash pits in House 2 is asymmetrical, indicating that the western side of the structure had a longer bunk line than the eastern side. As in the case of House 1, the House 2 bunklines are very clean: settlement patterns between the slash pit alignments and the side walls are limited to two subsurface features and a few isolated post moulds. Both of the features are miscellaneous pits: Feature 37, which is located in the bunkline in the eastern side of the structure; and Feature 19, which straddles the western side wall.

Eight of the House 2 features are ash pits. These are distributed at intervals along both sides of the central corridor, and at each end of the structure. These features had the following average dimensions: length (n=8), 48.6 cm; width (n=8), 35.9 cm; and depth (n=8), 12.0 cm.

The one support post accorded a feature designation in House 2 is Feature 12. It is located between two ash pits in the northeastern part of the central corridor. This post was asymmetrical in plan view and cylindrical in profile. It had a length of 27 cm, a width of 22 cm, and a depth of 31 cm. This post was significantly larger than the other



**Figure 6.** Detail of House 2

15 interior house posts in House 2: they ranged in diameter from 10-17 cm, with an average of 12.07 cm.

Seventeen features within House 2 consisted of miscellaneous pits. These vary in size and form. They had the following average dimensions: length (n=17), 48.9 cm; width (n=17), 27.2 cm; and depth (n=12), 16.9 cm. One miscellaneous pit, Feature 33, may actually represent a large support post. It has a length, width and depth of 38 cm, 26 cm and 25 cm, respectively; the profile is deep basin-shaped. Feature 33 is situated just inside the eastern row of slash pits, and occupies a similar position to the large post designated Feature 12 to the north.

The only definite hearth in House 2 is Feature 26, located 1.5 m north of the end wall. This feature had a shallow irregular profile. It was characterized by black artifact-rich topsoil with ash and fire-reddened soil. As in the case of House 1, ploughing had evidently destroyed direct evidence of any other hearths within House 2. Similarly, however, there is indirect evidence to suggest the presence and location of additional hearths. Two features in other areas of House 2 were mottled with fire-reddened soil indicating that they may have been situated in proximity to now-vanished hearths. Both are ash pits. One, Feature 42, is located on the western side of the central corridor and the other, Feature 11, is situated on the eastern side of the central corridor. The central corridor beside each of these features is empty, and it is suggested that one hearth was situated in the centre of the corridor adjacent to each: one in the central part of House 2, immediately east of Feature 42; and another in the northern part of House 2, immediately west of Feature 11.

The hearth hypothesized to have been associated with Feature 42 would have been located 4.5 m north of the Feature 26 hearth, while the hearth inferred to have been associated with Feature 11 would have been located 5.0 m to the north of the Feature 42 hearth. The relative spacing inferred for the placement of the hearths in House 2 equates well with the size of so-called "family compartments". The study of Neutral longhouses indicates that one or more family units sharing each hearth occupied a segment of the house measuring slightly more than 4 m in length (Fitzgerald 1982:257; 1984:11).

The identification of three potential hearths suggests that this structure housed a maximum of either three or six families, depending upon whether one family or two shared each hearth. If, following Warrick (1990), it is assumed that each family average 5.5 individuals, the maximum population of House 2 would have been in the order of 16-33 people.

The most singular feature in House 2 was Feature 1, located 1 m inside the northeast segment of the House 2 side wall (Figure 6). This feature contained the near complete remains of an infant and may represent a reused storage pit. It was kidney-shaped in plan view, and bathtub-shaped in cross-section. Feature 1 had a length, width and depth of 165 cm, 132 cm and 23 cm, respectively. More detailed information on this feature is presented in the Burial Patterns section.

**Post Moulds** House 2 is represented by 136 post moulds. These range from 5 to 27 cm in diameter, with an average diameter of 8.91 cm. The House 2 posts consist of 78 wall posts, 16



interior house support posts, and 42 interior house isolated posts.

The House 2 side walls and end wall are well defined, although the posts tend to be more loosely spaced than in House 1. It is interesting to note that the widest gap of all occurs in the eastern wall of House 2 directly adjacent to Feature 1. This gap is fully 2 m wide, and may represent an entrance in the side wall of the structure.

House 2 wall posts generally form a single continuous line, with little or no evidence of the staggered pattern seen in House 1. The total length of House 2 wall exposed is 43 m. This yields an average house wall post density of 1.81 posts per metre. The post mould density in the southern end wall is 3.38 posts per metre: this is significantly higher than the average for the structure, and may reflect rebuilding. That possibility would explain the lack of a gap representing a southern entrance in the end wall.

The house wall posts have an average diameter of 8.94 cm, with a range of 5-21 cm. Two unusually large posts are incorporated into the exterior wall. One, in the northern segment of the western side wall, is asymmetrical, measuring 12 by 15 cm. The other, in the southern end wall, has a diameter of 21 cm.

Including the post designated Feature 12, the 16 interior house support posts in House 2 range in diameter from 10-27 cm, with an average of 13.0 cm. A number of these posts are located adjacent to the lines of slash pits. Three of the support posts are more centrally located in the north-central portion of the structure. An additional two support posts flank the central corridor just inside the southern end of House 2.

The single greatest concentration of support posts is a cluster of six posts situated 1-3 m inside the southern end of House 2. Two of these posts occur within Feature 26, the hearth: the remaining four are located within 1 m of the feature. These posts are relatively modest in size: they range in diameter from 10 to 12 cm, with an average of 10.5 cm. They are clearly not contemporary with the hearth, although the excavation did not produce any evidence to indicate whether they pre-dated it or post-dated it.

The 41 interior house non-support posts range in diameter from 5 to 9 cm, with an average of 7.28 cm. Virtually all of these are located in the southern 5 m of the structure, and many are within or adjacent to the hearth. Some of these smaller posts may be contemporary with the hearth, and pertain to cooking or related activities. Others, including two small posts within the feature, may be assumed to predate or post-date it.

A series of 10 posts form an interior wall extending east-west across the width of House 2 along the 5S line of the excavation grid (Figure 6). This wall serves to separate the southern end of the interior of the structure, which is virtually clean, from the house end, which has a concentration of features and small posts. It has a length of 7 m and includes two somewhat larger posts which have been categorized as interior supports. Altogether, the 10 posts that comprise this wall range in diameter from 6 to 11 cm, with a mean of 6.8 cm. The density of

posts in this wall (1.71 posts per metre) is skewed by the fact that it incorporates two clusters of three posts. In reality, the posts in this wall tend to be widely spaced. They include a 1.75 m gap in the centre which forms an entrance. This wall is located 4.5 m north of the southern end wall of House 2. Only one slash pit is present between this inner wall and the southern end wall of House 2.

There are two possible interpretations for the interior wall in House 2. The first is that it represents a partition separating the living quarters from the house-end storage cubicle. The second is that it actually represents another, non-contemporary end wall, and that House 2 was either extended or contracted during the period of its occupation. Either possibility could apply. However, the density of interior post moulds and the presence of a slash pit, a hearth and other features in the southern end of the structure indicate that it formed part of a living area. Based on that evidence, it seems likely that the inner southern wall of House 2 formed an end wall at some point in the evolution of the structure, and that House 2 either expanded or contracted.

Interestingly, the extent of that hypothesized expansion or contraction, involving a 4.5 metre length of the structure, corresponds more-or-less precisely to the average distance between the inferred hearths for this structure, and to the length of so-called family compartments. This would suggest that the structural change was intended to adjust for the addition or deletion of a single family making use of the Feature 26 hearth, or two families sharing the same hearth.

### **Exterior House Features**

Seven exterior house features were recorded by the excavations (Figure 4). Exterior Features 1 and 2 consist of basal midden deposits pertaining to the Iroquoian occupation. Both had been truncated by bulldozing in preparation for construction of the weeping tile. Exterior Feature 3, located immediately adjacent to the palisade, consisted of a so-called "ghost feature" with a length and width of 84 cm and 66 cm, respectively. Screening of the fill and flotation of a 15 litre sample of soil from this feature produced 1604 pieces of chert debitage, 6 bifaces, 2 scrapers, 12 utilized flakes, 6 cores, 8 fragmentary sherds, as well as faunal remains, carbonized plant remains and charcoal. None of the material from this pit is culturally or temporally diagnostic, but the nature of the feature suggests that it may be pre-Iroquoian.

Exterior Feature 4 had a length of 73 cm and a width of 18 cm. It was not excavated. No cultural remains were recovered from this feature. Exterior Feature 5 consisted of a small ovate pit with a length of 39 cm and a width of 27 cm. Screening of the feature and flotation of a 6.5 litre soil sample produced 1 utilized flake, 4 pieces of chipping detritus, 4 body sherds, 4 pieces of bone, and 6 carbonized plant remains.

Exterior Features 6 and 7 consist of small pits located between the south ends of Houses 1 and 2. Feature 6 had a length and width of 41 cm and 23 cm, respectively. Screening of the fill and flotation of 9 litres of soil produced a small sample of charcoal, carbonized plant remains and faunal remains. Feature 7 was situated immediately adjacent to Feature 6. It had a length and width of 39 cm and 20 cm, respectively. It was not excavated, and no artifacts were recovered



from it.

### **Palisade**

Excavations in the eastern extremity of the area investigated revealed a 13.75 metre long segment of the palisade. The exposed segment consisted of 33 post moulds (Figure 4). The diameter of the palisade posts had a range and mean of 7-12 cm and 9.29 cm, respectively. As such, the palisade posts were generally comparable in diameter to average dimensions of wall posts of House 1 (9.46 cm) and House 2 (8.94 cm). To the southwest, the palisade extended beyond the limits of excavation into the ploughed field; to the northeast, it continued beyond the edge of excavation beneath the bulldozed topsoil pile which defined the eastern edge of excavation.

The exposed segment of the palisade is slightly sinuous in configuration. It consists of a continuous single line of posts. One significant break is present, toward the southern end of the segment: this section has only two posts in a 4 m long gap in the alignment, with an additional two posts immediately beyond the alignment. This gap may represent a southern entrance to the village. Exterior Feature 3 is located at this point.

### **Exterior House Post Moulds**

A total of 43 posts moulds were recorded over and above those which pertained to House 1, House 2 and the palisade (Figure 4). Two of these exterior house isolated posts were located between the two houses, near the southern edge of excavation, in the vicinity of the small exterior pits designated Exterior Features 6 and 7. These two posts both had diameters of 12 cm. The remaining 41 exterior posts were situated in the eastern half of the excavation, in the area between House 2 and the palisade. These posts had an average diameter of 7.24 cm, with a range of 5-18 cm.

Seven of the exterior posts, in the area west of the north end of the palisade, are aligned east-west. These appear to form a wall segment of unknown function. They range in diameter from 6-10 cm, with a mean of 7.28. This possible wall is oriented perpendicular to the projected line of the palisade, which is situated roughly 7 m to the east. As the intervening area was not excavated, it is not known whether this line connects with the palisade.

The remaining 34 exterior posts are distributed north, west and southwest of the basal midden deposit designated Exterior Feature 2. They have an average diameter of 7.23 cm, with a range of 5-18 cm. These posts form a broad arc extending southwest to northeast, but the pattern is too diffuse to suggest an actual wall. The eastern limit of this arc lies 2 m west of the palisade.

### **Burial Patterns**

Past and present investigations of the greater Fradenburg site have demonstrated that human remains occur in two distinct contexts at the site: within longhouse interiors inside the village;

and adjacent to the village, in a separate mortuary area. These are discussed below.

### **Interior-House Remains**

Post-excavation analysis of bones recovered by the salvage excavations demonstrated the presence of the remains of two human infants. Both probably pertain to the in-house burial pattern, independent of the communal burial area represented by the Fradenburg ossuary, located approximately 240 m to the west of the structure. The analysis of the remains by Dr. Michael Spence showed that these two individuals both represent very young infants, and that they are among the youngest infant skeletons ever found in Ontario. As noted by Spence (Poulton et al. 1996, Appendix A: 2), "both may have died at birth, and both may well have been stillborn or premature births."

Infants 1 and 2 were recovered from the northern part of House 2. This area of the site sustained the most damage prior to archaeological excavation, with the topsoil entirely removed by bulldozer. One of the individuals, Infant 1, was incomplete, and was recovered as isolated bone collected from the bulldozed surface of the 5 m unit of the excavation grid designated 5N 10E. The other, Infant 2, was relatively complete, and was recovered in the excavation of Feature 1, immediately to the north.

The northern edge of the 5 m<sup>2</sup> which produced the disturbed remains of Infant 1 spanned the width of the central corridor of the House 2 interior. This square contained a variety of subsurface features, as follows: 6 slash pits; 2 ash pits; 2 miscellaneous pits; and 1 large support post. All of these features are of modest size, and none produced any evidence of human remains upon excavation. This suggests that none of these features is likely to represent the place of origin for the remains of Infant 1. Assuming that Infant 1 derived from a disturbed feature in the vicinity, the most likely possibility is that it originated in the upper portion of the same pit which produced Infant 2. Whether the two infants represented siblings or twins cannot be determined. Nor can it be determined whether the remains of either infant had already been disturbed by ploughing, or if they were intact until the feature which contained them was truncated by the bulldozer.

Feature 1 which contained Infant 2 was located 1 metre inside the northeast segment of the House 2 side wall. Pit fill generally consisted of topsoil mottled with chunks of charcoal. The profile revealed an ash lens near the base of the pit. The contents show that Feature 1 was relatively rich, although none of the remains are suggestive of ritual offerings such as grave goods. Notable finds included a white oval European glass trade bead (type IIa15) and a cylindrical antler flaker, the only antler flaker recovered. Additional finds included the following: 1 projectile point; 3 utilized flakes; 2 cores; 333 pieces of chipping detritus; 1 hammerstone; 1 anvil stone; 2 pieces of fire-cracked rock; 2 rim sherds; 1 fragmentary rim; 4 neck-shoulder sherds; 16 body sherds; and 1 lump of clay. Other recoveries from this feature consisted floral and faunal remains.



Floral remains included a small sample of wood charcoal and carbonized plant remains. The analysis indicated the presence of ash, hickory, white oak and ironwood. Carbonized plant remains were limited to 13 fragments of corn kernels. Interestingly, tobacco seeds were notable by their absence. Considering the relatively large amount of soil processed by flotation (75.5 litres), the absence of tobacco is probably real, and may point to a lack of ceremonialism involving a tobacco offering. This would be consistent with the lack of other material evidence for grave goods.

The remains of Infant 2 were not articulated and went unnoticed among the large quantity of animal bone in Feature 2. This feature contained 1301 individual faunal remains, representing 46.5% of the faunal sample from the site. The remains included a minimum of two deer (one immature) as well as black bear, racoon, black squirrel, bird, fish and bullfrog. Relative to the sample as a whole, the variety of fish is perhaps the most notable aspect of the faunal remains from the feature: a minimum of seven fish genus are represented: catfish, drum, rock bass, sturgeon, walleye/sauger, redhorse, and bowfin.

Based on the contents of this feature, it may represent a reused storage pit. It was located on the eastern side of what is interpreted as the communal storage area at the north end of the structure. The area of the inferred storage cubicle is quite clean: subsurface remains are limited to three features: the above feature; and two ash pits (Features 2 and 5).

A 2 m wide gap located in the eastern side wall immediately adjacent to Feature 1 may represent an entrance to the house. The placement of the remains of Infant 2 within the living structure corresponds to a pattern long noted on Ontario Iroquoian sites. As observed by Kapches (1976:29), this burial pattern probably relates to a particular belief recorded for the historic Huron in the early 17<sup>th</sup> century. In his description of an infant interment, Father Brébeuf noted: "...for little children who die less than a month or two old; they...inter them on the road, in order that, they say, if some woman passes that way, they may secretly enter into her womb, and that she may give them life again, and bring them forth" (Thwaites 1896: 10:273).

The underlying belief system involving the burial of infants in places frequented by women has been substantiated archaeologically for the prehistoric and historic Huron and Neutral, and the remains of Infants 1 and 2 may represent additional examples of that pattern. Given the ethnohistorical evidence, the proximity of Feature 1 to a possible entrance may be more than coincidence, as it would have required women entering this part of the house to pass directly over the burial pit on a regular basis.

### **The Fradenburg Cemetery**

As summarized above, the burial component of the Fradenburg site has conventionally been termed the Fradenburg ossuary. Very little information is available on the mortuary component of the site. However, background information and comparative data do offer some grounds for speculation. The placement Stothers inferred for the Fradenburg ossuary in 1974 based on the investigations by Kingdon and the Kenyons would put it in the same general area as that

indicated by Pringle in 1936, but somewhat further back from the river. While it may be that the slight difference in the location of the ossuary as recorded by these different individuals simply reflects a lack of precision in the data, it is also possible that these ossuaries actually represented separate multiple burial pits in a more extensive cemetery. That possibility is suggested by the fact that Neutral ossuaries typically occur as one or more multiple interments in a larger cemetery, in contrast to Huron ossuaries which occur as discrete burial features.

Neutral burial sites which date prior to the epidemics of the 1630's tend to have a single large ossuary with peripheral pits containing articulated burials (Lennox and Fitzgerald 1990:453). Nevertheless, comparisons with other Glass Bead Period 2 mortuary sites shows that individual cemeteries may well contain more than one ossuary. To date, only four GBP2 mortuary sites have been identified in addition to the Fradenburg ossuary. These are the Shaver Hill cemetery (AiHa-1), Smith-Saeger cemetery (AhHa-6), the Misner cemetery (AhHa-27), and the earlier grave features at the GBP2-3 Grimsby cemetery.

The Shaver Hill cemetery is associated with the Christianson village (AiHa-2). These two sites form part of the Spencer-Bronte cluster. They are situated on adjacent drumlins, 650 m apart. Excavations of the badly looted Shaver Hill cemetery by Stothers (1972) in 1968 indicate that it consisted of two ossuary pits, one containing in excess of 163 individuals, the other 18 individuals, with an additional eight peripheral pits containing between one and three individuals. The 1968 excavations indicate that this cemetery covered an area measuring 8.5 m by 6.3 m, although the possibility of additional peripheral burials beyond the limits of excavation cannot be discounted.

The Misner and Smith-Saeger cemeteries are located in the Fairchild - Big Creek cluster. Misner is associated with the Misner village (AhHa-27), located approximately 125 m to the northeast. Limited salvage excavations following the looting of the cemetery in 1984 suggest that it consisted of a single large communal burial with associated individual interments (Fox 1985:8). The excavations, which totalled 176 m<sup>2</sup>, are estimated to have uncovered roughly a quarter of the cemetery, suggesting that the entire Misner cemetery covered a surface area of approximately 700 m<sup>2</sup>.

The Smith-Saeger cemetery is associated with the Smith-Haley village (AhHa-5), situated on the opposite side of a creek about 200 m to the northeast. Unlike the Shaver Hill and Misner cemeteries, Smith-Saeger is relatively undisturbed. Limited investigations suggest that it covers an area roughly 50 m<sup>2</sup> in size (MCZCR site record form), or 40 by 30 m (Lennox and Murphy 1989).

The Grimsby cemetery covers a total surface area of approximately 15 by 30 m containing in excess of 55 burial pits (W. Kenyon 1982). An analysis of select cultural remains from this site by Kenyon and Fox (1982) indicates that the cemetery was used over a long period of time spanning Glass Bead Periods 2 and 3, from ca. 1615 to 1650 A.D., although Fitzgerald (1990:242) speculates that it may have covered a much shorter time span, ca. 1630-1640 A.D. The analysis by Kenyon and Fox indicates that six of the graves date from the latter half of



GBP2, ca. 1615-1624/1630. These six covered an area extending some 5 m by 2 m, and included 27 individuals. They comprised one larger and partially disturbed multiple interment (Grave 45) which contained a minimum of 18 individuals, and five additional graves which contained between one and four individuals (Graves 46 and 47 and 52-54 inclusive). The related village has not been discovered.

In summary, comparisons demonstrate that historic Neutral ossuaries invariably occur within a larger cemetery. The data for Glass Bead Period 2 mortuary sites also indicate that the majority of interments took place within a single large burial pit, but that a second smaller ossuary pit may also be present, and that additional interments invariably occur in association with the main burial feature. Altogether, the comparative data and the available background information indicate that what has been conventionally referred to as the Fradenburg ossuary probably represented a more extensive cemetery. This suggests the possibility that undisturbed burials may still be present within the cemetery, and represent future concerns for archaeological resource management.

The location of the Fradenburg cemetery relative to the village compares most closely with the Smith-Saeger cemetery and the Smith-Haley village, in that the burial and habitation components are relatively close to each other and are not separated by a water course or major landform. Just how close the cemetery is to the village could only be determined by an investigation of the western part of the Fradenburg site. For the present, the investigations indicate that the maximum distance between the village and the cemetery is no more than 150 m, and that it is probably significantly less.

## **Artifact Analysis**

The 1989 investigations of the Fradenburg site resulted in the recovery of a total of 7167 specimens exclusive of floral remains. As detailed in Table 2 the sample is dominated by chipped lithics (n=4029, 56.2%) and faunal remains (n=2799, 39.1%). Together, they comprise 95 % of all of the remains recovered. Detailed analysis of the assemblage is provided in the licence report (Poulton et al. 1996) and summarized below.

### **Ceramics**

Ceramics are the third most common artifact class in the sample, but their relative scarcity is indicated by the fact that the 326 specimens represent only 4.6% of the overall collection. The vast majority of ceramics are attributed to the historic Neutral occupation of the site. These consist of eight rim sherds, three fragmentary rims, 15 neck-shoulder sherds, 61 body sherds, 228 fragmentary sherds, one clay pipe fragment, and nine lumps of clay. In addition, two vessels were identified which are attributed to earlier occupations predating the historic Neutral occupation.

***Historic Neutral Vessels*** The sample includes eight vessels pertaining to the historic Neutral occupation of the site. Two of these are represented by fragmentary rim sherds. The remaining

six are represented by rim sherds: one by two rims, and the remaining five by single rims.

*Physical Characteristics* A total of 314 sherds are attributed to the Neutral component of the site. Most of these sherds are from vessels manufactured with grit temper (n=305, 97.1%). A minority have shell tempering (n=9, 2.9%). All of the shell tempered specimens derived from a single feature: Exterior Feature 2, the basal midden deposit located between House 2 and the palisade.

<b>Table 2. The Fradenburg Site: Frequency of Cultural Remains</b>			
<b>CLASS/CATEGORY</b>		<b>TOTAL</b>	
		<b>f</b>	<b>%</b>
<b>Ceramics</b>	Rim sherd	8	0.10
	Middle Woodland vessel	2	0.03
	Fragmentary rim	3	0.04
	Neck-shoulder sherd	15	0.21
	Body sherd	61	0.85
	Fragmentary sherd	228	3.18
	Pipe fragment	1	0.01
	Lump of clay	9	0.13
	<b>subtotal - ceramics</b>	<b>327</b>	<b>4.55</b>
<b>Chipped Lithics</b>	Projectile Point	9	0.13
	Point Preform	6	0.08
	Biface	27	0.38
	Drill	2	0.03
	Scraper	55	0.77
	Graver	1	0.01
	Utilized Flake	99	1.38
	Core	60	0.84
	Chipping Detritus	3770	52.60
	<b>subtotal - chipped lithics</b>	<b>4029</b>	<b>56.22</b>
<b>Ground &amp; Rough Stone</b>	Whetstone	1	0.01
	Anvilstone	1	0.01
	Hammerstone	2	0.03
	Stone bead	1	0.01
	Miscellaneous	1	0.01
	<b>subtotal - rough &amp; ground stone</b>	<b>6</b>	<b>0.08</b>
<b>Worked Bone &amp; Antler</b>	Antler flaker	1	0.01
	Bone Bead	1	0.01
	<b>subtotal - worked bone &amp; antler</b>	<b>2</b>	<b>0.02</b>
<b>European Trade Goods</b>	Glass beads	2	0.02
	Metal scrap	3	0.04
	<b>subtotal - European Trade Goods</b>	<b>5</b>	<b>0.07</b>
<b>Faunal Remains</b>		<b>2799</b>	<b>39.1</b>
<b>Floral Remains</b>	Charcoal	92.3 g	-
	Carbonized Plant Remains	6.6 g	-
	<b>subtotal - Floral Remains</b>	<b>98.9 g</b>	<b>-</b>
<b>TOTAL</b>		<b>7168</b>	<b>100.04</b>



Shell tempering is confined to a body sherd and eight fragmentary sherds. The body sherd is cord malleated. Similarly, five of the eight fragmentary sherds with shell tempering can be identified as fragments of body sherds, and feature smoothed-over cord malleation. In short, the present sample suggests that shell tempering at the Fradenburg site is associated with corded ceramics. However, the reverse is not necessarily true, as the assemblage did include a few cord malleated sherds with grit temper.

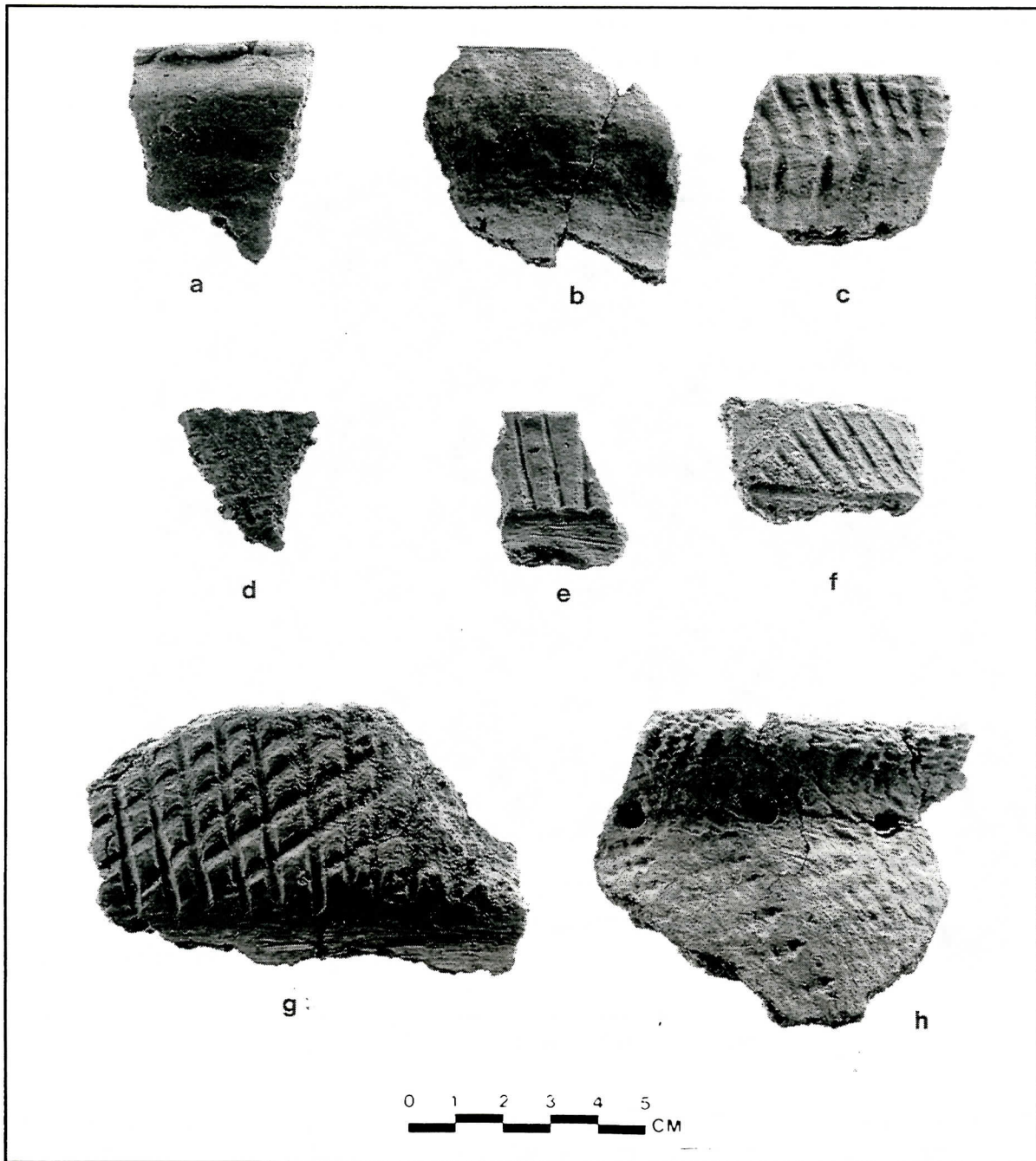
The attribute of rim form could be observed for all eight Late Woodland vessels. The majority are collared (n=7); the exception is collarless. Lip thickness had a range of 5-12 mm, with a mean of 7.5 mm. The attributes of collar height and thickness could be observed for five of the seven collared vessels. Collar heights have a range of 11-39 mm, with a mean of 21.6 mm. Basal collar thicknesses have a range of 8-13 mm, with a mean of 9.8 mm.

Exterior-interior profiles of the eight Neutral vessels are as follows: straight-concave, n=3; concave-convex, n=2, and straight-straight, straight-convex and concave-convex, n=1 each. Lip form is dominated by flat specimens (n=7). The sole exception is rounded. The angle of lip to interior is evenly split between right-angled and acute (n=4 each). Shoulder form could be observed for only five sherds. All are rounded in form.

*Decorative Motifs and Techniques* Following McNeish (1952), vessel types could be assigned to five of the eight vessels. All are represented by single examples, with the following types present: Middleport Criss-Cross (Figure 7g); Lawson Incised; Huron Incised (7e); Sidey Notched (7f); and Niagara Collared (7b). Five of the vessels were recovered from pit features within House 2, one was recovered from the basal midden designated Exterior Feature 2, and two were recovered as surface finds. The two rims representing Vessel 1 (Figure 7g) were recovered from separate pits in House 2, Features 2 and 40, which were located 8 m apart.

The attributes of interior, lip and exterior collar decorative motif and technique could be observed for all eight Neutral vessels. All have plain interiors. Four of the vessels have plain lips; the other four have decorated lips. The four examples with lip decoration are all executed by linear stamping: two of the motifs consist of linear stamped obliques; the other two of linear stamped verticals.

Exterior collar decoration is present on seven of the eight vessels. Decorative techniques are as follows: incised, n=3; linear stamped, n=3; and indeterminate, n=1. Decorative motifs are variable, consisting of obliques (n=2), opposed (n=2), criss-cross (n=1), criss-cross over obliques (n=1), and indeterminate (n=1). Neck decorative motifs and techniques could be observed for a total of 19 sherds, including 14 individual neck-shoulder sherds. The vast majority are plain (n=16, 84.2%). One of the exceptions features an undecorated neck with a smoothed-over ribbed paddle surface treatment. Decoration is confined to two specimens: one has one or more encircling incised lines on the upper neck above indeterminate. The other features a band of encircling obliques executed by linear stamping above or below plain. The attributes of shoulder decorative motif and technique could be observed for five sherds. Four are plain. The fifth features an encircling line of punctates above or below plain.



**Figure 7. Miscellaneous Ceramic Vessels**

***Prehistoric Vessels*** Vessel 9 is inferred to pre-date the Neutral occupation of the site. It was recovered from Feature 10 of House 1. This feature consisted of a pottery concentration at the interface of the ploughzone and subsoil. Vessel 9 is represented by a total of 66 sherds exclusive of fragmentary sherds: 28 upper and lower rim sherds; and 38 body sherds. The majority of the sherds have been reconstructed to form two large vessel sections: these physically match, but the extent of



the matching portion is insufficient to allow a more extensive reconstruction. One of the segments of Vessel 9 is illustrated in Figure 8, below.



**Figure 8.** Middle Woodland Vessel

Vessel 9 was manufactured using the paddle and anvil technique. Temper consists of relatively large pieces of granitic material, with diameters of up to 6 mm. The vessel is collarless, and features a narrow flat lip with a lip thickness of 9 mm. The interior and exterior surfaces of the vessel are cord malleated throughout. On the interior, the cording is oriented horizontally, and is smoothed around the upper portion of the interior. On the exterior, the cording is oriented obliquely (left-to-right). Interior decoration is present in the form of an oblique encircling band of smoothed-over dentate stamped impressions immediately below the lip. These obliques are oriented right-to-left. The same decoration has been applied on the exterior to form two encircling bands on the upper rim: a narrow band immediately below the lip; and a wider band immediately below the first. These obliques angle across the orientation of the exterior cording. The exterior decorative motif tends to become lost,

as the underlying cording tends to be as deep as the dentate stamping. However, in some areas the juxtaposition of left-to-right cording crossed by right-to-left stamped obliques give the impression of a criss-cross design.

The second vessel which predates the Neutral occupation of the site is Vessel 3. It is represented by three rim sherds, all of which physically match (Figure 7h). Vessel 3 was manufactured by the paddle and anvil technique. It is collarless and features a flat everted lip. Interior decoration is present in the form of an encircling band of obliques decorated by cord wrapped stick. Lip decoration extends slightly over onto the upper rim, and represents a continuation of the interior decoration. The neck and body are cord malleated. Exterior decoration is present in the form of an encircling line of circular punctates which form interior bosses. In addition, the body and neck feature oblique plaits executed by cord wrapped stick.

Vessel 3 was recovered from the basal midden deposit designated Exterior Feature 2. It closely resembles a vessel recovered from the Porteous site (Stothers 1974: 336, Plate XIII-1). Comparisons suggest that it may be attributed to a brief occupation of the site by late Princess Point or early Glen Meyer peoples.

***Ceramic Pipes*** The only smoking pipe represented in the collection is a small fragment of a stem. It was recovered as a surface find on the edge of the field near the barn.

***Lumps of Clay*** A total of nine lumps of clay were recovered. All derived from House 2: one piece from Feature 1; and eight pieces from Feature 2. All are fired but untempered.

### **Chipped Lithics**

Chipped lithics comprise the most abundant artifact class at the Fradenburg site, representing over half of all of the material recovered (n=4,029, 56.22%) (Table 2). These totals are exclusive of a small collection of chipped lithic specimens from the northern half of the Fradenburg village, in the possession of the neighbouring landowner.

***Projectile Points*** In total, nine projectile points were recovered from the 1989 excavations of the Fradenburg site. However, only three projectile points are complete: two Archaic notched points and one triangular Daniels type point. The remaining projectile points are represented by tip and base fragments. The relative lack of Iroquoian projectile points is presumed to represent sample bias, and it is likely that the specimens in the private collection from the Fradenburg site are more representative of the site than the sample recovered by the 1989 excavations.

One of the notched points recovered in 1989 is a heavily reworked side-notched point of Haldimand chert (Figure 9e). It measures 37.5 mm, 24.0 mm and 7.0 mm in length, width and thickness. The lateral edges and base are straight and the base is heavily ground. This point is of the Middle Archaic Otter Creek type (Ellis et al. 1990:85-86). Although this point is Middle Archaic in age, it was recovered from House 2 Feature 40, together with a triangular point preform.



The other notched point recovered in 1989 is a serrated corner-notched specimen made of Onondaga chert (Figure 9d). This pre-Iroquoian point also was recovered from House 2 while shovel shinning the house interior. It is nearly complete, missing a small portion of its tip. It has a length of more than 30.7 mm, a width of 19.1 mm and a thickness of 4.8 mm. The lateral edges are convex in shape and serrated. The base is straight and slightly ground. Although this point cannot be typed with certainty, in shape and in size it would appear to be most similar to the Crawford Knoll type of the Late Archaic (Ellis et al. 1990). It may represent a serrated variant of this type.

The remaining complete point is of the Daniels Triangular type and is associated with the historic Iroquoian Neutral occupation of the site (Figure 9a). It is made of Onondaga chert and measures 26.0, 17.0 and 3.7 mm in length, width and thickness. It has convex lateral edges and a concave base. This specimen was recovered from Feature 1 of House 2.

In addition to this complete point, the base of another triangular point was recovered from House 2. This specimen is made of Onondaga chert. It has a length of over 14.7 mm, a width of 18.9 mm and thickness of 4.1 mm. The base is slightly concave in shape. This point was recovered from House 2 Feature 32. The remaining point fragments are represented by tips (n=5). All are made of Onondaga chert. One each of these tips was recovered from House 1, House 2 and the basal midden, Exterior Feature 2. The remaining two tips were surface finds. One of the latter has serrated lateral edges. This specimen may be another example of serrated corner-notched points associated with the Late Archaic or it may be a serrated triangular point associated with the Historic Neutral component.

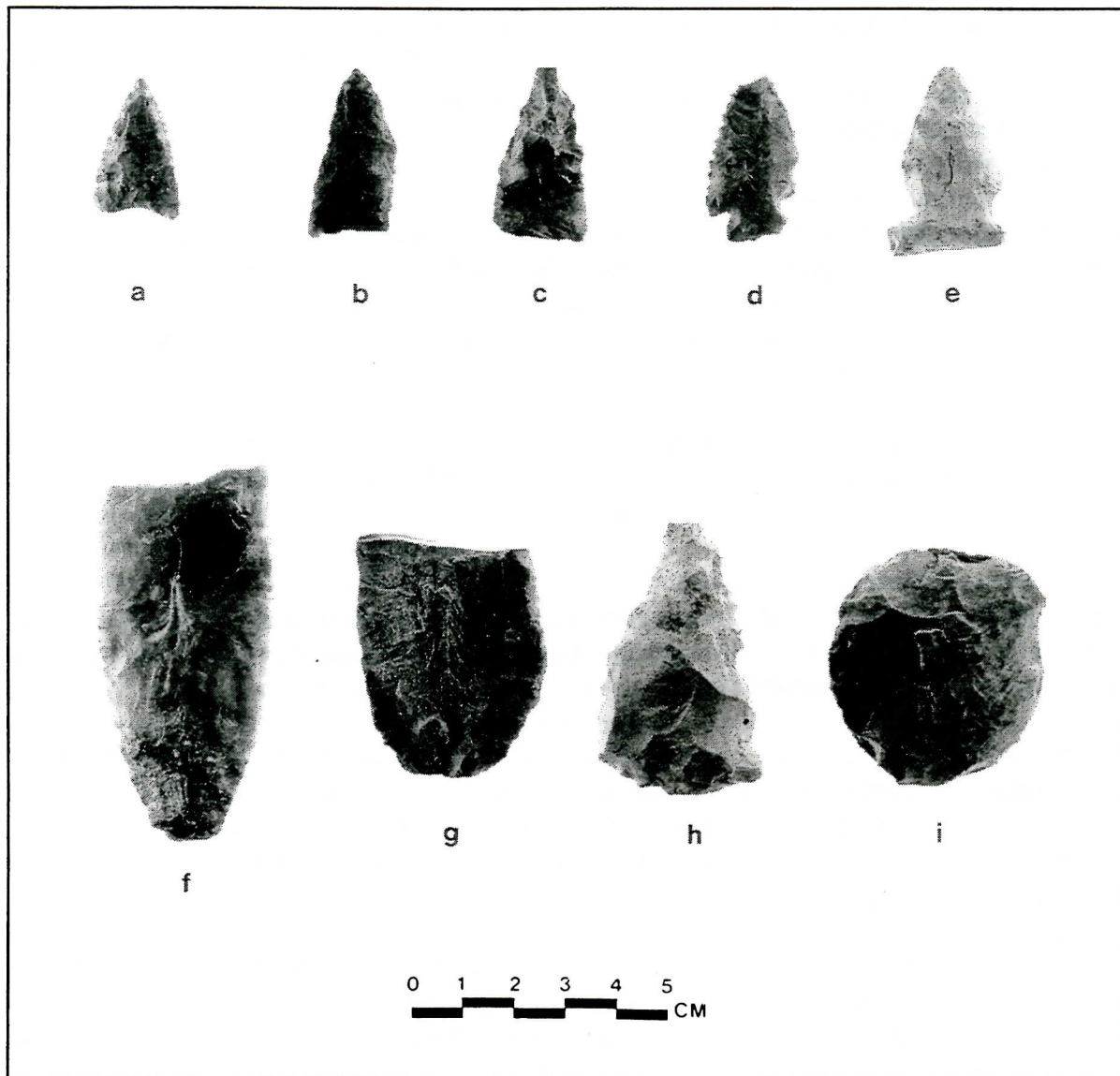
**Point Preforms** Six point preforms were identified. Three of the preforms are complete or near complete and the other three represent tip, mid-section and basal fragments. The complete preforms are triangular in shape and probably represent preforms for Daniels type projectile points. These preforms are slightly larger than finished Daniels type points, averaging 34, 20 and 6 mm in length, width and thickness.

One of the triangular preforms was recovered from House 2 Feature 40, the same feature that also contained the Middle Archaic side-notched point (Figure 9c). The other preforms were recovered from the basal midden (Exterior Feature 2, n=1) (Figure 9b) and the general surface (n=4).

**Bifaces** A total of 27 bifaces were recovered. These comprise 4 cache blades, 2 denticulates, 17 preforms and 4 biface fragments. The biface fragments are small edge fragments of Onondaga chert.

**Cache Blades** Four cache blades have been identified. All are fragmentary. Two are from House 2; one is from the palisade area; and the fourth is a surface find. Two of the cache blades are made of Onondaga chert and the other two are made of exotic cherts.

The two cache blades made of exotic chert are proximal fragments; both are finely flaked. One has a lanceolate shape and a bi-convex cross-section (Figure 9f). This specimen is made of Flint Ridge chalcedony. It measures more than 69.9 mm in length and is 32.0 mm wide and 9.2 mm thick. This cache blade was recovered while shovel shinning in the vicinity of the palisade. Cache blades of Flint Ridge chalcedony frequently are associated with Middle Woodland occupations. The presence



**Figure 9. Projectile Points and Bifaces**

of this cache blade, in addition to a Middle Woodland pot, suggests a small Middle Woodland component for the Fradenburg site.

The other cache blade is made of an unidentified chert, most likely Bayport or Selkirk (Figure 9g). It is ovate in shape and bi-convex in cross-section. It has a length of over 45 mm, a width of 35.8 mm and a thickness of 7.1 mm. This piece was recovered while shovel shinning House 2. Like the cache blade of Flint Ridge chalcidony, this specimen may pertain to a Middle Woodland component.

The two remaining fragmentary cache blades are made of Onondaga chert. The larger has a length of over 45.3 mm, a width of more than 32.6 mm and a thickness of 8.1 mm. It is bi-convex in cross-



section and appears to be lanceolate in shape. It too was found while shovel shinning in House 2. The smaller Onondaga cache blade has a length of more than 38.0, a width of 24.5 or more and a thickness of 6.8 mm. It is bi-convex in cross-section and appears to be lanceolate in shape. This specimen is a general surface find.

*Denticulates* Two of the bifaces have denticulate lateral edges suggesting use as knives. Both these bifaces are crudely flaked and plano-convex in cross-section. One is made of an oval nodule of Onondaga chert which retains cortex on two surfaces. The nodule measures 46.9, 31.9 and 14.1 mm in maximum length, width and thickness. The denticulate edge is more than 34.4 mm long and expands over one lateral edge and one end. It is convex to straight in shape. This specimen was recovered from House 2 Feature 37.

The other denticulate also is made of Onondaga chert with remnants of nodular cortex. It measures 60.6 mm long, 28.8 mm wide and 19.9 mm thick. The denticulate edges extend over the length of both lateral edges. It was recovered from the surface.

*Preforms* The remaining bifaces are fragments of preforms. These artifacts were recovered from features around the palisade (n=6), the basal middens (n=4), House 2 (n=2) and House 1 (n=1). The remainder are surface finds (n=4). Two of the preforms are illustrated in Figure 9: a triangular preform (9h); and a circular preform (9i).

*Drills* Two drills were recovered. Both are made of Onondaga chert. One is a fragment of an expanding base drill, missing the drill tip and portions of the base. It is more than 29.0 mm long, 10.6 mm wide and 6.4 mm thick. This specimen was a surface find. The other drill is also an expanding base drill. It measures 41.2, 20.3 and 17.0 mm in length, width and thickness. This drill was found in House 2 Feature 41.

*Scrapers* A total of 55 scrapers were identified in the Fradenburg lithic assemblage. The majority of scrapers were surface finds with no definite subsurface association (n=23). Of the remainder, most were recovered from the houses (20 of 32, 72%). Few scrapers were recovered from either the features in the palisade (7, 21.9%) or the basal middens (5, 15.6%).

Seventeen of the scrapers are end/side scrapers, 19 are end scrapers and 19 are side scrapers. Four of the 54 scrapers (7.4%) have serrated edges. Two of the serrated scrapers are end/side scrapers, the other two are side scrapers.

*End/Side Scrapers* All but one of the scrapers with distal and lateral retouch are made of Onondaga chert. The one exception is made of an unidentified chert. The end/side scrapers are made on primary flakes or flake fragments and one is made on a bifacial piece. Thirteen of the end/side scrapers have retouch on both lateral edges, the remaining four have retouch on one lateral edge in addition to the distal end retouch. Fradenburg end/side scrapers have the following average dimensions: 41.3 mm long, 30.4 mm wide and 12.0 mm thick. Retouched edge shape is predominately concave (n=31 of 49 or 63%), while retouched edge length averages 23.7 mm.

**End Scrapers** Like the end/side scrapers, end scrapers in the sample are made almost exclusively of Onondaga chert. The one exception is made of Haldimand chert. The end scrapers have smaller average dimensions than either the end/side scrapers or side scrapers: they have a mean length, width and thickness of 34.8 mm, 25.9 mm and 7.4 mm, respectively. Like the end/side scrapers, the end scrapers are made primarily on flake fragments and primary flakes. In most instances the retouched edge of end scrapers is convex in shape. The average length of the retouch is 24.1 mm. In addition to distal end retouch, 10 specimens display evidence of lateral edge use retouch. The average length of the utilized edge is 24.8 mm and the shape of the use retouched edge is usually convex.

**Side Scrapers** Side scrapers, like the other scraper forms, are made almost exclusively on primary flakes of Onondaga chert. Side scrapers are comparable in size to side/end scrapers at 41.8 mm long, 28.4 mm wide and 9.7 mm thick. Most of the Fradensburg side scrapers display evidence of retouch on only one lateral edge (16 of 19, 84.2). The retouched edge is located predominately on the dorsal surface of the lateral edge and has a straight shape (7 of 21, 33.3%) or a concave shape (6 of 21, 28.6%).

**Utilized Flakes** In total, 99 pieces of chipping detritus appear to have been utilized. Unlike scrapers, which appear to be concentrated in the houses, utilized flakes appear to be evenly distributed across the area of excavation. Excluding surface finds (n=45), 20 (37.0%) utilized flakes were recovered from the houses, 18 (33.3%) from the palisade area features, and 16 (29.6%) from the basal middens.

In most cases primary flakes were chosen for use (n=40, 40.4%). However, unlike scrapers, secondary flakes also were frequently chosen for use (22 or 22.2%). Most of the utilized flakes are made of Onondaga chert (95 or 96%), followed by Haldimand chert (3, 3%). One of the specimens is made of an unidentified chert. Utilized flakes average 31.4 mm long, 23.7 mm wide and 6.0 mm thick. In most cases, the dorsal surface of the lateral edge is used (58 of 141 or 41.1%), followed by the ventral surface of the lateral edge (39, 27.7%), and the dorsal surface of the distal edge (36, 25.5%). Use retouched edge shape is fairly evenly split between straight (39 of 141, 27.7%), convex (38, 27.0%) and concave (36, 25.5%). Average use retouched edge length is 18.4 mm.

**Graver** One graver has been identified. This specimen is made on a flake fragment of Onondaga chert and measures 25.6+, 22.7 and 13.5 mm in length, width and thickness. It has one spur on the lateral edge of the ventral surface of the flake. The graver was recovered from the basal midden designated Exterior Feature 2.

**Cores** All but two of the 60 Fradensburg cores are made of Onondaga chert. The two exceptions are made of unidentified chert. The majority of cores are block cores (27 of 60 or 45%), followed by random cores (n=19, 31.7%). The remainder are core fragments. In total, 24 (40%) of the cores have cortical surfaces. In most cases the cortex suggests that nodular pebble cherts were used. Three of the cores have tabular cortex.

**Chipping Detritus** In total, 3,770 pieces of chipping detritus were recovered during excavation of the Fradensburg site. The majority of the debitage is made of Onondaga chert (3,456 of 3,767 or



91.7%), followed by unidentified cherts (292 or 7.8%) and Haldimand chert (23 or 0.6%). The flaking debris is composed predominately of fragments (2,220 or 58.9%). The remainder of the debitage assemblage is fairly evenly divided between flakes from cores (703 or 18.7%) and flakes from bifaces (804 or 21.3%). Few flakes from uniface retouch (9 or 0.2) or shatter pieces (35 or 0.9) were identified.

In total, 914 of the 3,769 (24.3%) pieces of debitage display evidence of being burnt either in the presence of pot lids, "crazing" or discolouration. Burnt material is fairly evenly distributed across the site, comprising 23% of palisade chipping detritus, 25% of the basal midden detritus and 27% of the sample from the houses.

A small portion of flaking debris has cortical surfaces (83 of 3769 or 2.2%). The majority of the pieces with remnant cortex derive from the houses (n=42, 50.6%). The rest derive from the general surface (n=11, 13.3%), features around the palisade (n=25, 30%) and basal middens (n=5, 6.0%). Chipping detritus recovered from the houses average 4% cortical surfaces (House 1, 5%; House 2, 4%), whereas only 1% of detritus recovered from the palisade area and the basal midden retain cortical surfaces.

Ten outre passè pieces were identified. Outre passès are large flakes that have the entire dorsal surface of the biface including both lateral edges. These flakes are considered errors in the biface reduction process. The majority of these were recovered from features around the palisade, in particular Feature 3 (6 of 10, or 60%). The remainder derive from House 2 (20%), Exterior Feature 2 (10%) and the general surface (10%). Outre passès account for almost 1% of the sample of flakes from bifaces. This is a fairly high percentage, a fact which may indicate that the vicinity of the palisade was a centre for biface manufacture.

### **Rough and Ground Stone**

The rough and ground stone class comprises six specimens. These represent a mere 0.08% of the collection. They consist of two hammerstones, one anvilstone, one whetstone, one bead and an unidentified slate object. These items are described below.

Both hammerstones are made of granite. One of the specimens is complete. It measures 66.6, 60.7 and 48.4 mm in maximum length, width and thickness. It has a rounded shape with one pitted surface. It was recovered while shovel shinning the interior of House 1. The other hammerstone is represented by a fragment over 43.1 mm long, 76.4 mm wide and 32.1 mm thick. This specimen is pitted and flaked on one end. It was recovered from House 2 Feature 1.

The anvilstone also was recovered from House 2 Feature 1. This specimen is oval in shape and measures 79.8, 40.3 and 17.8 mm in maximum length, width and thickness. It has one pecked surface.

The whetstone is over 61.5 mm long, 54.4 mm wide and 16.8 mm thick. This specimen has smoothed surfaces and ground lateral edges. It was recovered while shovel shinning the interior of

## House 2.

The stone bead is of red siltstone and is rectangular tubular in form. This specimen is fragmentary: it is split longitudinally, and is missing one end. It has an incomplete length of 65.2 mm and a width of 10.7 mm. The cross-section reveals that the hole for suspension was actually drilled from each end, with the two holes meeting at a slightly divergent angle. The exterior surface of the broken end of the bead also features the beginning of a drill hole: it may have been intended to perforate the fragment for suspension as a pendant, following the breakage of the bead. This specimen was recovered by Fred Moerschfelder in the spring of 1989, as a surface find in the midden at the base of the telephone pole, approximately 25 m southwest of the House 1 excavations (Figure 2).

The unidentified slate artifact is probably a fragment of a pendant preform. It is flaked and slightly ground and measures more than 65.5 long, 40.8 wide and 9.6 mm thick. It was recovered as a surface find within the disturbed area near the edge of the property line, directly east of the house construction.

### **Worked Bone and Antler**

This class accounts for 0.02% of the collection and it is represented by only two specimens. The first is a fragment of an unfinished bone bead. One end of this specimen is irregularly scored and snapped; the other is broken. The bead was recovered from Exterior Feature 2, the basal midden. The second artifact in this category is a cylindrical antler flaker. It has a length, width and thickness of 78 mm, 9.4 mm and 7.4 mm, respectively. The flaker was recovered from Feature 1 of House 2.

### **European Trade Goods**

***Metal Scrap*** Three pieces of metal scrap were recovered. Based on the scratch test (Fitzgerald and Ramsden 1988), all have been identified as copper. One piece was found in the ploughed field south of House 1 and the other two were excavated from Features 10 and 34 in House 2.

***Glass Trade Beads*** Two glass trade beads were recovered from the Fradenburg village. One of these was found by Fred Moerschfelder in the spring of 1989, in a surface examination of the field to the south of the area that was the focus of excavations later that year. It was recovered from the midden at the base of the telephone pole. This specimen is a fragment of a star bead. The fragment is burned and does not retain any of the original exterior surface. It has an incomplete length, width and thickness of 12 mm, 17 mm and 10 mm, respectively.

The other specimen was recovered during the course of the salvage excavations in the fall of 1989. It is a small white oval bead (type IIa15). This specimen has a length and diameter of 5.7 mm and 3.7 mm, respectively. This bead was recovered in the flotation of a 75.5 litre soil sample from Feature 1 of House 2.



## **Floral Remains**

Screening and flotation recovered a total of 48 palaeobotanical samples from the Fradenburg site. These comprise 92.3 g of charcoal and 6.6 g of carbonized plant remains. An analysis of the floral remains by Rudy Fecteau is presented in Appendix C of the licence report (Poulton et al. 1996). For reference purposes, highlights are detailed below.

A detailed analysis of the wood charcoal focussed on 16 larger samples. This revealed the following:

Among the identified wood taxa, white and red oak and oak species fragments combined with ash had the greatest abundance (44.6% - 120 fragments). Ash appears in 4 of 16 (25%) samples and oak (including white and red oak and oak species fragments) are present in 7 of 16 (43.75%). Sugar maple makes up 5.3% (13 fragments) and occurs in 3 of 16 samples (18%); white elm comprises 4.8% (7 fragments) and occurs in 4 of 16 (25%) samples. The remaining taxa, pine, hickory, slippery elm and ironwood, account for 14.18% (25 fragments). (Poulton et al. 1996:Appendix C:25)

A total of 104 light fraction samples were examined for charred plant remains, and identifiable seed remains were identified in 39. The remains include a modest representation of native and non-native plants. Data on the cultigens are as follows:

The cultigen material identified was extremely fragmented. Only five maize seeds and five sunflower kernel meats were identified. The largest percentage of charred cultigen material was maize kernel fragments which account for 70% (133 fragments) of the material recovered. The five maize kernels were recovered from Exterior Feature 2. The two sunflower achenes without the pericarp (thin shell) were identified in House 2, Feature 2...The other three sunflower achenes were recovered from House 2, Feature 15. (Ibid.:34-35)

Indigenous plants similarly had a limited representation in the Fradenburg collection. The sample was confined to two shell fragments of the walnut family (Juglandaceae), two seeds of bramble, and one seed of hawthorn.

## **Faunal Remains**

A total of 2799 bone and shell fragments were recovered from excavation of the Fradenburg site. The majority of the faunal remains were recovered from flotation samples (1521, 54%). Half of the total sample was burnt or calcined (53%) and most of these burnt and calcined materials belong to mammals or are of unknown class.

The majority of faunal remains identified to class are mammalian (84.9%). Fish remains account for most of the remainder (11.0%), followed by molluscs (2.0%), amphibians (1.4%), birds (0.7%) and reptiles (0.2%). Slightly more than one-third of the faunal remains (964, 34%) could not be

identified to class.

**Mammals** Most of the mammal remains that could be categorized by size belong to large mammals (93.4%). Of the identified species, white-tailed deer (*Odocoileus virginianus*) predominates, accounting for the majority of mammals (104 of 138, 75%) and for the majority of the entire faunal sample identified below class (104 of 178, 58%). All body elements of the deer are represented and they were recovered from all areas of the site. The other identified large mammal species is black bear (*Ursus americanus*). This species is represented by one bone, a proximal phalanx, recovered from the surface of the site.

The identified medium sized mammals comprise four raccoon bones and one beaver bone. Raccoon (*Procyon lotor*) bones were recovered from both houses and Exterior House Feature 2. The sole beaver (*Castor canadensis*) bone, a femur, was recovered from House 2 Feature 12. Portions of a deer skull were also recovered from this feature.

Grey squirrel (*Sciurus carolinensis*) is the second most frequently identified mammal species (24, 17.3%). However, unlike deer remains which were found in all areas of the site, squirrel remains were recovered predominately from interior house features (19, 79%). The grey squirrel remains from House 2 were found exclusively in House 2 Feature 1.

The four bones identified as muskrat (*Ondatra zibethicus*) were recovered only from House 1 Feature 4. This feature also contained deer, black squirrel, raccoon and sucker remains.

**Fishes** Despite the small size of the fish sample, a variety were recovered. Recovery of fish remains was largely restricted to House 2 and in particular Feature 1 of House 2. This feature contained 49% of the fish sample and at least seven species. Identified fish remains recovered from Feature 1 of House 2 include: all the freshwater drum (*Aplodinotus grunniens*, 4), catfish (*Ictalurus* sp., 1), walleye/sauger (*Stizostedion* sp., 1) and bowfin (*Amia calva*, 1); and six of the seven rock bass elements (*Ambloplites rupestris*); one of the two lake sturgeon (*Acipenser fulvescens*) shutes; and two of the three redhorse bones (*Moxostoma* sp.), .

The majority of species represented in the faunal collection are either spring or late spring to early summer spawners. However, the freshwater drum (*Aplodinotus grunniens*), unlike the other fishes, spawns in summer and fall (Scott and Crossman 1975:814).

**Amphibians** All amphibian remains belong to the family of frogs and toads. Ten amphibian bones have been tentatively identified as bull frog (*Rana catesbeiana*). The remainder could not be identified to species.

**Birds** A total of 13 bird bones were recovered; however, none could be identified below class. The bird remains are represented by small bones.

**Reptiles** The only reptile remains identified belong to the turtle family. These consist entirely of small plastron and carapace fragments. Identification to species was not possible.



To summarize, it is difficult to interpret the results of the faunal analysis as the assemblage is small. Nonetheless, the predominance of deer and the variety of fish remains recovered suggest that the Fradenburg site, at the very least, was occupied during spring to fall. The Fradenburg sample is similar to faunal remains identified at the Cayuga Bridge site, a component of the late Middle Woodland Princess Point culture located upstream (Burns 1972). At both sites, white-tailed deer and grey squirrel were the most frequently identified mammals and freshwater drum, sturgeon and redhorse were recovered from both sites. Further, birds remains do not comprise a significant amount of either assemblage, accounting for roughly 1% of these faunal assemblages. This would suggest that subsistence strategies had not changed significantly in the centuries between the occupation of the two sites.

## Comparisons

Past and present investigations of the greater Fradenburg site demonstrate that it consists of an historic Neutral habitation site and associated cemetery. Research on the historic Neutral has identified a range of settlement types which were occupied year-round, including small villages or hamlets of about one acre in size, more substantial villages of one to five acres in size, and large villages or towns in excess of five acres (Kenyon 1972:6-7; Noble 1984:13; Lennox and Fitzgerald 1990:438-438). No thorough assessment of the overall Fradenburg habitation has ever been conducted. However, available evidence indicates that it falls within the middle range of year-round occupation sites. This fact, combined with the presence of the cemetery, both serve to identify the habitation as a relatively substantial village site.

The investigations of the Fradenburg village yielded a total sample of 4368 specimens exclusive of floral and faunal material and human remains. Comparisons with other historic Neutral villages indicate that the relative proportions represented in the assemblage are aberrant. Most other sites dating from GBP2 and 3 have collections which are dominated by roughly equal frequencies of ceramics and chipped lithics, in the range of 40-50% each. At Fradenburg, chipped lithics account for 92.2% of the artifacts and debitage, whereas ceramics account for only 7.5%. Similarly, other Neutral villages tend to have higher frequencies of rough and ground stone, worked shell, and worked bone and antler, each of which tends to account for 1-3% of the collections, and of European trade goods, which account for between 1 and 7%. The Fradenburg sample includes minimal quantities of ground and rough stone (0.14%), worked bone (0.05%) and European trade goods (0.07%), with a total absence of worked shell.

One possibility which could explain some aspects of the Fradenburg sample is that it is biased by the presence of undiagnostic material (most notably chipping detritus) which relates to one or more prehistoric occupations of the site. That possibility is suggested by the presence of projectile points, cache blades and pottery which predate the Neutral occupation. However, the limited quantity of such diagnostics suggests that earlier components are unlikely to have contributed greatly to the overall collection.

Another possibility is that the unusual nature of the Fradenburg sample may reflect the geographic position of the site. For example, the proximity of the site to sources of Onondaga chert near the

Lake Erie shore only 6 km away may have resulted in a greater abundance of chert, with a correspondingly higher representation of the chipped lithic industry in the overall assemblage. Similarly, the comparatively low frequency of European trade goods could reflect the greater distance of the Neutral of the Lower Grand from the Huron middlemen of Simcoe County and the ultimate source of the supply, the French on the St. Lawrence River.

While either or both of these explanations may pertain, they do not explain other aspects of the collection, such as the absence of worked shell, the virtual absence of smoking pipes, and the paucity of worked bone, antler, and rough and ground stone. These factors serve to remind us that the artifact sample derives from a relatively limited excavation in one small area of the site. As a result, the collection undoubtedly suffers from sample bias. In consideration of that fact, the presence of certain traits is of use for purposes of interpretation, but the absence or relative proportions of artifact classes, categories or traits may well be misleading and cannot be given much weight.

Granting the above provisos, the material recovered from the Fradenburg village is useful in furthering our understanding of the site. The white ovate glass bead (type IIa15) is consistent with the previous dating of the site to Glass Bead Period 2, based on material recovered from the ossuary and the inferred relationship between the ossuary and the village. The tentative identification of the metal scrap from the site as copper would also be consistent with this dating, as research has demonstrated there was a shift through time from the use of copper kettles to the less expensive brass kettles (Fitzgerald 1990:408-413). Copper was twice as common as brass on the Christianson site, the only other Neutral village dating from GBP2 with an analyzed sample, but by GBP3, brass kettles dominated to the virtual exclusion of copper (Ibid.:412).

One of the artifacts recovered from the Fradenburg site in 1989 helps to refine the dating of the site. This is the red siltstone bead with a rectangular tubular form. Red siltstone occurs as cobbles in secondary contexts on Manitoulin Island and along the north shore of Lake Huron (Fox 1988), and may also have been available along the south shore of Georgian Bay (Lennox and Fitzgerald 1990:435). It formed the raw material for the manufacture of beads and other decorative items manufactured by the Petun and/or Odawa (Ibid). Tubular red siltstone beads were being manufactured on sites in the Collingwood area by about 1620 A.D. (Kenyon and Fox 1982:12). They are absent from the GBP2 Christianson village (ca. 1610-1620 A.D.), and first appear in Neutralia late in the GBP2 sequence. Beads of this type are present in the GBP2 Grave 46 and GBP3a Graves 11, 36 and 49 of the Grimsby cemetery, and occur with regularity on GBP3b components such as the Hamilton and Walker sites (Ibid.). Accordingly, the recovery of a rectangular tubular siltstone bead from Fradenburg demonstrates that the village dates from late in GBP2, with a date in the range of 1620-1624/1630 A.D.

The Fradenburg site is one of a dozen or so Neutral sites documented for the Lower Grand River cluster (Table 1, Figure 1). A few of these reportedly consist of prehistoric or 16<sup>th</sup> century components, but most have been identified as historic, and five have reportedly produced European glass beads or metal trade goods: the Fradenburg village and cemetery; the Indiana/McSorley site; Tufford; Dunn; and the Marshall ossuary. The site inventory covers a range of site types, including one or more larger habitations or villages and cemeteries, riverine hunting and fishing camps, small



interior camp sites, and chert quarries. Altogether, the inventory suggests a resident population engaged in exploiting the full range of natural food and other resources.

Intensive survey in this area has been somewhat limited, especially beyond the immediate vicinity of the Grand River itself, and several sites undoubtedly await discovery. Nevertheless, the inventory suggests that the Neutral population of the Lower Grand was quite modest by comparison with the Fairchild-Big and Spencer-Bronte site clusters, and it is likely that Fitzgerald (1990:324) is correct in inferring that the sites of the Lower Grand relate to a single community developing through time. There is evidence to suggest that the Neutral presence in the area spanned the period from GBP1 to GBP3. It is possible that this village sequence represented the linear movement of the community downstream over time, as inferred by Fitzgerald (*Ibid.*). The ultimate origin of the population remains to be determined. The closest candidates identified by research are prehistoric Neutral village sites on the Nanticoke Creek and Black Creek drainages approximately 20 km to the west (Fox 1976, Hamaleinan 1977). It is possible that these people were the ancestors of the historic Neutral of the Lower Grand, and that they shifted into the area as part of the widespread eastward movement of the Neutral in the 16<sup>th</sup> century.

The presence of certain traits in the Fradenburg sample is of interest in identifying similarities to other Neutral populations. For example, serrated lithics, identified for chipped lithic samples for all of the site clusters for which data are available, are present here. Similarly, slash pits, a common architectural feature on protohistoric and historic Neutral longhouses, are present at Fradenburg. Longhouse patterns are available for five of the various Neutral site clusters, and slash pits have to date been identified as a feature of house construction on four of them: Spencer-Bronte; Lower Bronte; Fairchild - Big Creek; and the Lower Grand. The sole exception is the cluster in the northeastern Niagara Peninsula, where no slash pits were observed in the five longhouses recorded by the 1979 excavations of the Thorold site (Noble 1980:50). Whether this pattern holds true for all parts of the Thorold site and for other occupation sites in that cluster is unknown. Regardless, the evidence indicates that slash pits were a common structural feature which cross-cut the boundaries between different tribal clusters, and it seems likely that future research will establish this construction technique was employed far more widely than currently available data would indicate.

Other traits which Fradenburg shares with at least some of the contemporary site clusters elsewhere in Neutralia are the presence of shell-tempered and cord roughened pottery. These two traits often occur on collarless vessels and are viewed as evidence of foreign influences (Lennox and Fitzgerald 1990:417). Pottery exhibiting this suite of traits has been interpreted as the product of manufacture by female captives from the Mascouten or Fire Nation, an Algonkian-speaking group from the southwestern Lake Erie drainage basin with whom the Neutral were at war in the early 17<sup>th</sup> century (Lennox 1981:356-358; Lennox 1984b:263; Fitzgerald 1982:258).

Shell tempering and cording have generally been associated with each other, but research by Dodd (1995:246) demonstrates that they can occur independently. The incidence of shell tempered ceramics shows both temporal and geographic trends. It is significantly higher in Neutral sites of the so-called Northern Tier of the Spencer-Bronte cluster, where it increases through time, from a bare representation of 0.3% at the mid 15<sup>th</sup> century Hanes (or Zap) site (ca. 1530-1570 A.D.) to 14% at

the GBP2 Christianson site (ca. 1600-1630 A.D.) and 27% at the GBP3b Hood site and 64% at the GBP3b Hamilton site (ca. 1630-1650 A.D.) (Lennox and Fitzgerald 1990:418; Fitzgerald 1990:298). Comparable data are not yet available for all other Neutral site clusters during GBP2 and 3, but where they are, the incidence of shell tempering is considerably lower than in the Spencer-Bronte cluster. For example, shell tempering at the GBP3a Walker site and the GBP2/3 Stratford site of the Fairchild-Big cluster has an incidence of 4% and 5%, respectively (Wright 1981; Fitzgerald n.d.). A similar frequency of 7% has been recorded at the GBP3b Borscok site in the Lower Bronte cluster (D.R. Poulton & Associates 1993:32), while the incidence of shell tempering is only 1.1% at the GBP2/3 Thorold site in the northeastern Niagara Peninsula cluster (Noble 1980:52).

In the Fradenburg sample, shell tempering has a maximum occurrence of 2.9% and cording has a frequency of 4.9%. The low occurrence of cording and shell tempering correspond with an absence of certain other foreign traits such as applique strips, as well as a low incidence of collarless vessels. It is possible that the incidence of shell tempering and corded pottery at Fradenburg reflect limited foreign influences from directions other than the southwest Lake Erie basin, for example from the Whittlesey focus of northeastern Ohio. In any event, in the relatively low occurrence of these traits, the Fradenburg pottery resembles ceramic samples characteristic of several other Neutral site clusters, notably Fairchild-Big, Lower Bronte and the Northeastern Niagara Peninsula.

The low frequency of the pertinent foreign traits in these site clusters is in marked contrast to the Spencer-Bronte cluster. This may indicate that the tribes in question were not active participants in the warfare with the Fire Nation of southwestern Michigan and northwestern Ohio, or that they participated in the conflict to a much lesser degree than the people of the Spencer-Bronte cluster. Certainly, the close cultural ties between the various tribes of the Neutral confederacy offered any number of alternative mechanism for the introduction of these traits.

The evidence available, while very incomplete, further suggests that the frequency of these foreign traits decreases with distance from the Spencer-Bronte cluster. The Lower Bronte cluster immediately to the east, and the Fairchild-Big cluster immediately to the south, are characterized by low frequencies of shell tempering in the neighbourhood of 4-7%, whereas the Thorold and Fradenburg sites which pertain to separate populations lower in the Niagara Peninsula have even smaller frequencies of shell tempering in the neighbourhood of 1-3%. Whatever the mechanism(s) for the introduction of these traits may have been, the data suggest that the intensity of the relevant cultural influence or contact decreased with distance to the Spencer-Bronte cluster.

## **Summary and Conclusions**

The Lower Grand River has been the focus of professional and amateur archaeological investigations for over half a century. However, none of the past investigations in this area has involved an intensive study of the Late Woodland presence. In consequence, the 1989 salvage excavations of the Fradenburg site afford the first detailed glimpse into the Neutral occupation of the area.



The salvage excavations of the Fradenburg site revealed parts of two longhouses and a segment of the palisade. While the excavations were limited to one small part of the eastern extremity of the site, the surface examination of the surrounding area, together with a review of past research on the site, suggests that it consisted of a relatively large village with an associated cemetery, and that it dates late in Glass Bead Period 2, ca. 1620-1624/1630 A.D.

Granting that the artifact sample from the site may not be representative of the village as a whole, the remains recovered suggest both similarities to and differences with other contemporary Neutral peoples. In particular, the low frequencies of shell-tempered and corded ceramics may suggest that the Neutral of the Lower Grand cluster did not participate in the conflict between the Neutral of the Spencer-Bronte cluster and the Algonkian-speaking peoples of the Fire Nation of southeastern Michigan and northwestern Ohio. At the very least, the variations in foreign influences tend to underscore the differences which researchers have long noted between the various tribal clusters of the Neutral confederacy. The extent and nature of those differences forms one of the most interesting topics for future study of the Neutral.

Past surveys in the vicinity of the Lower Grand River have documented a modest inventory of a dozen or so Neutral sites, most of which date to the historic Neutral of the late 16<sup>th</sup> and early 17<sup>th</sup> centuries. The evidence suggests that they subsume a range of types, and that they relate to the development of a single community through time.

As a basis for meaningful interpretation, the Neutral site inventory for the Lower Grand obviously leaves a great deal to be desired. With the partial exception of the Fradenburg village, deficiencies in the data base include limited artifact samples, an absence of controlled surface collections and detailed mapping to document site size, type and limits, and an absence of subsistence and settlement pattern data generated by professional excavations. Indeed, it is a reflection of the deficiencies of the data base that not one of these sites, including Fradenburg, has had a level of investigation equivalent to a Stage 3 archaeological assessment as defined by the Ministry guidelines (MCTR 1993). These problems are not a reflection on the quality of past research conducted in the area. Rather, they derive from the fact that most of the work was carried out some decades ago, as part of larger research designs extending well beyond the area, and that the investigations in question lacked both the resources and the mandate to accomplish a more in-depth study of the historic Neutral occupation of the Lower Grand.

Great advances in Neutral research have been made since the inception of detailed studies in the 1960's. This is most particularly true of the Spencer-Bronte and Fairchild-Big site clusters, the scene of intensive survey and extensive excavations, and the subject of numerous publications. These two clusters shared the dual advantage that they were located within a convenient distance of the centre of research at McMaster University, and that they comprised by far the greatest concentration of historic Neutral settlement. However, our understanding of the Neutral occupations of the Spencer Creek, Bronte Creek, Fairchild Creek and Big Creek drainages has also benefited from the fact that they are situated within the urban shadow of the Golden Horseshoe. In consequence of development pressures and of legislation requiring archaeological assessments, the foundation of knowledge created by pure research in this area has been further built upon by the results of archaeological

surveys and excavations carried out in the course of cultural resource management activities.

To date, the Lower Grand River has been peripheral to the main focus of Neutral research. The relative lack of development pressures in this area has also meant that the absence of intensive research has not been compensated for to any significant degree by archaeological resource assessments. That situation is unlikely to change in the near future. Nevertheless, the events which occasioned the 1989 salvage excavations serve as a reminder that threats to archaeological resources can occur anywhere, even in a setting as pastoral as the Lower Grand of the Fradenburg Tract.

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